Greater East End Management District

Greater East End Management District

Houston, Texas

Paige Street Pocket Park & Trail

June 2013

CCA Project No. 112-029

Clark Condon Associates
10401 Stella Link Road
Houston, Texas 77025

Greater East End Management District
Paige Street Pocket Park & Trail

LANDSCAPE IMPROVEMENTS

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NOTE: Bold Capitalized Specification Sections are included in the City of Houston Standard Specifications for Wastewater Collection Systems, Water Lines, Storm Drainage, and Street Paving, dated October 2002; and are incorporated in Project Manuals by reference as if copied verbatim.

Document	Document No.
COORDINATION AND MEETINGS	**01312**
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TRAFFIC CONTROL AND REGULATION	**01555**
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CURB, CURB AND GUTTER, AND HEADERS	**02771**
CONCRETE SIDEWALKS	**02775**

I. INVITATION FOR BID

Sealed bids will be received in duplicate on this project as indicated below.

DISTRIBUTION: Greater East End Management District
3211 Harrisburg Boulevard
Houston, TX 77003
713-928-9916

PROJECT: Paige Street Pocket Park & Trail

OWNER: Greater East End Management District

BID TIME: 3:00 P.M.

BID DATE: Tuesday, June 25, 2013

PRE-BID: Wednesday, June 12, 2013, at 10:00 A.M.
Greater East End Management District
3211 Harrisburg Boulevard
Houston, TX 77003

LOCATION OF
BID SUBMITTAL: Robert Fiederlein
Greater East End Management District
3211 Harrisburg Boulevard
Houston, TX 77003
713-928-9916

Subcontractors and Suppliers intending to submit bids to Owner are required to prepare their bids based on a complete set of bidding documents. If, after reviewing a complete set of bidding documents, Subcontractors and Supplier Bidders desire to purchase individual drawings and specifications sections for their bidding convenience, they may do so by ordering the specific drawings and specifications through the Landscape Architect's office. Each bidder purchasing a partial set of bidding documents is responsible for determining exactly which documents he requires and he will be billed the actual cost of printing plus delivery and postage charges (if any).

Subcontractors and Suppliers exercising this option must agree to do so on the basis that (1) all documents will be returned to the Owner, without refund, on the bid due date, and (2) documents will not be used on other construction projects.

Applicable law requires that the general prevailing rates of per diem wages for work of a similar character in the locality in which the Work is to be performed be ascertained and not less than such rates to be paid to each laborer, worker, and mechanic employed on this project. The applicable labor classifications and rates are set forth in Exhibit B of Section VIII to the Contract Documents.

All bids, whether mailed or delivered, must be in the hands of the Owner’s Representative not later than the above specified time for above project. Bids received after the Bid Time will not be considered. All bids should be sealed and marked on the outside of the envelope with the name of the project. Bids shall be submitted in duplicate on exact copies of the BID FORM provided. Bidders should return their Bidding Documents with their Bid Proposal.

No bid shall be withdrawn for sixty (60) days after opening of bids without written consent of the Owner. The Owner reserves the right to reject any bids and to waive any informalities in bidding. A decision concerning award of Contract will be made public as soon as practicable.

The approximate contract start date is July 1, 2013.

END OF SECTION

II. INSTRUCTIONS TO BIDDERS

1. PREPARATION OF BIDS. Unless otherwise directed in the INVITATION TO BIDDERS, each bid shall be submitted in duplicate on the bid forms provided or on photocopies of the forms, in conformity with the requirements of the INVITATION TO BIDDERS, these INSTRUCTIONS, and the instructions printed on the BID FORM.

   All blanks on the bid form shall be completed, typed or written in ink, and no change shall be made on the bid form or any other of the CONTRACT DOCUMENTS. Any bid may be rejected if it contains any omission, erasure, alteration, addition, irregularity of any kind, or items not called for; if it does not submit prices for each of the items in the bid form; if any of the prices are obviously unbalanced; or if it shall in any manner fail to conform to the conditions of the INVITATION TO BIDDERS or these instructions.

   The bidder shall sign its bid in the signature space. If the bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be shown, together with the names and addresses of the partners or officers. If the bid is made by an individual, it must be acknowledged by that person; if made by a partnership, it must be acknowledged by one of the partners; or if made by a corporation, it must be acknowledged by the person signing on behalf of the corporation.

   Each bidder must submit a fully completed Contractor's Statement of Qualifications to Owner with its bid (see Section IV). The information will be considered in the award of the Contract. Failure to complete the Statement accurately or to submit the Statement may, at Owner's option, disqualify the bidder from consideration in the award of the Contract. The form for the Statement is a part of the Contract Documents.

   Each bid must be accompanied by a Certified or Cashier's Check or a Bid Bond (the "Bid Security") drawn for at least two (2) percent of the total amount of the bid if the total bid amount is less than $100,000 or five (5) percent of the total amount of the bid if the total bid amount is $100,000 or more and made payable to the Owner only. The successful bidder shall forfeit bid security to the Owner as liquidated damages if it shall fail or refuse to enter into a proper contract for the Work, including failure or refusal to furnish the Payment Bond, required by the Contract.

   The Contractor's Statement of Qualifications should be placed in a separate envelope than the bid and each shall be submitted simultaneously.

2. CONTRACT DOCUMENTS. The instruments, plans and specifications comprising the CONTRACT DOCUMENTS are as defined in Article 9 of the Agreement. The CONTRACT DOCUMENTS are complementary and must be read together and as a whole; what is called for by one is as binding as if called for by all.

   Bidders desiring further information or further interpretation of any part of the CONTRACT DOCUMENTS shall submit a written request for such information to the Owner's Representative and Owner not less than five working days before the bid opening. Answers to these requests will be given in writing to all bidders as addenda to the Contract, and each addendum will be made a part of the Contract. No explanation or interpretation of the Contract, other than written addenda, shall be binding. Should a bidder find discrepancies in or omissions from the CONTRACT DOCUMENTS or should it be in doubt as to any meaning, it should notify Owner's Representative so a written addendum may be sent to all bidders. It is the responsibility of each bidder to determine if it has received all addenda, complete files of which will be maintained at the Owner's Representative's office.

Each bidder shall inform itself fully of the requirements and labor conditions under which the work will be performed and shall be presumed to have inspected the work site and to have read and to be thoroughly familiar with the CONTRACT DOCUMENTS. Failure to do so will not relieve the successful bidder of its obligation to furnish all material and labor necessary to carry out the provisions of the Contract and to complete work for the consideration of its bid.

3. PRE-BID CONFERENCE. A voluntary pre-bid conference among Owner, prospective bidders, and others will be held on Wednesday, June 12, 2013, at 10:00 a.m. at Greater East End Management District, 3211 Harrisburg Boulevard, Houston, Texas, 77003.

4. SUBCONTRACTORS. A list of all proposed subcontractors must be submitted with the bid documents.

5. SUBSTITUTIONS. When material or equipment is specified by a trade or brand name, it is not the Owner's intent, unless otherwise provided, to prohibit use of an equal product of another manufacturer. Such specifications are intended to set a definite standard of quality or performance and to establish an equal basis for the evaluation of bids. In preparing its bid, each bidder is expected to include in the base bid the cost of the items so specified. A bidder wishing to offer substitute items of equipment or materials for those specified by brand names must do so by indicating on the bid form, in the space provided for substitution the items it wishes to substitute, the corresponding specified items to be replaced by the substitution, and change (increase or deduction) in the base bid that would result if Owner were to accept the substitute items. Consideration of alternates will be limited to substitution of individual items of material or equipment specified by brand names. Each offer for a substitution shall be accompanied by duplicate copies of complete descriptive matter and information on the substitute item. Owner reserves the right to accept or reject each substitution offered.

6. ADD ALTERNATES. Approximate quantity and a space for unit price have been provided for any Add Alternate Items as shown in Section III - Bid. These items are included to allow the Owner to add to the contract if desired. When additional work is performed, payment will be based on the unit prices entered in the bid for Add Alternates. The Owner may accept the Add Alternate in total or in part, or may reject it completely.

7. DELIVERY OF BIDS. It is each bidder's responsibility to deliver its bid to the Owner's office named in the Invitation to Bidders before the Bid Time. The fact that a bid was dispatched will not be considered. The bid must actually be timely delivered to be considered. Faxed bids will not be accepted.

8. AWARD OF CONTRACT. Unless it elects to reject all bids, the Owner will award the Contract after a thorough analysis of the bids submitted. The approximate contract start date will be as specified in the invitation to bid. The award will be made on the basis of which bid, in the Owner's judgment, will be most advantageous to the Owner, will result in the best and most economical completion of the Work, and was made by a person that Owner knows to be responsible. Owner reserves the right to reject any or all bids and to waive technical defects in bidding, as the interests of Owner may require. In case of ambiguity or lack of clarity in stating the prices in any bid, Owner shall consider the construction of bid most advantageous to Owner or, at its option, reject the bid. A bidder may withdraw its bid before the Bid Time without prejudice to itself by submitting a written request for its withdrawal to the Owner's Office. Within seven days of oral notice of award of the Contract, the successful bidder shall submit to the Owner all information and other items necessary to complete the CONTRACT DOCUMENTS, including Contractor's safety program. The Owner shall then prepare the final CONTRACT DOCUMENTS for execution by the bidder. The successful bidder shall return the

signed CONTRACT DOCUMENTS to the Owner within five days of receipt, or the Owner may disqualify the bid and accept another bid.

The successful bidder must furnish within five (5) days after the date the Contract Documents are received by the Contractor a Payment Bond (if the contract bid amount is $25,000 or more) and a Performance Bond (if the bid amount is $100,000 or more) on the forms furnished with the Contract Documents, in the amount of one hundred percent (100%) of the total Contract price. The bonds issued shall name the Owner as the obligee. The surety company must be authorized to do business in Texas, which authorization must be recorded in the files of the State Board of Insurance. The surety company must be authorized to issue payment and performance bonds, as applicable, in the amount required for the particular contract, which authorization must be recorded in the files of the State Board of Insurance. The person executing the payment and performance bonds must be authorized by the surety company to execute payment bonds on behalf of the company in the amount required for the contract and such authorization must be recorded in the files of the State Board of Insurance. If the agency, but not the agent executing the bonds, has an appointment from the surety company, the agent executing the bonds must be an officer or director of the agency. The name, address and toll-free telephone number of the surety company must be listed on the bond with the notation that claims are to be submitted to such address. The Contract shall not be in effect until such bonds have been provided by the Contractor and accepted by the Owner. **ALL BONDS MUST BE ON THE FORMS PROVIDED IN THE CONTRACT DOCUMENTS. NO OTHER FORM WILL BE ACCEPTED.**

9. FTA COMPLIANCE. The successful bidder will be required to comply with all relevant federal rules, regulations and reporting requirements of the Federal Transit Administration. All relevant Federal procurement and implementation guidelines will be followed for this Work.

10. FUNDS. The Owner has available sufficient funds to pay the successful bidder in cash in accordance with the provisions of the Contract.

11. NUMBER OF SIGNED SETS OF DOCUMENTS. The CONTRACT DOCUMENTS will be prepared in at least three original sets for signature, one for delivery to the successful bidder. Owner will furnish the successful bidder three sets of PLANS and TECHNICAL SPECIFICATIONS free of charge, and additional sets may be obtained from the Owner's Representative at the Owner's Representative's reproduction rates.

12. PRECONSTRUCTION CONFERENCE. A Preconstruction Conference will be scheduled with the successful bidder and his subcontractors upon awarding and executing the contract.

13. SALES TAX EXEMPTION. This Contract is issued by an organization which qualifies for exemption pursuant to the provisions of Section 151.311 of the Texas Limited Sales, Excise and Use Tax Act. All sections of the bid proposal indicated as a public are to be public facilities and are exempt from sales tax. There is no sales tax exemption for items indicated in the bid proposal as private facilities. Contractor shall include all applicable sales tax in the unit price bid for all items bid as private.

For the public portion, the Contractor shall obtain the necessary documentation so that any sales tax exemptions due to the nature of the work performed by Contractor or its subcontractors of any tier pursuant to the Contract shall be applied to the Contract, and these cost savings due to the Project's exempted status shall be passed on to the Owner. Contractor and each of its subcontractors or sub-subcontractors must obtain a Texas Limited Sales, Excise and Use Tax Permit for all non-private materials required to be purchased in connection with the Project.

The Contractor or subcontractors performing this Contract for the public portion of the Contract may purchase, rent or lease all non-private materials, supplies, equipment used or consumed in the performance of this Contract by issuing to his supplier an exemption certificate in lieu of the tax, said exemption certificate complying with State Comptroller's Ruling No. 95.0.07. Any such exemption certificate issued by the Contractor or subcontractors in lieu of the tax shall be subject to the provisions of the State Comptroller's Ruling No. 95.0.09, as amended, to be effective October 2, 1968.

14. MINIMUM WAGE RATES. Owner has determined the general prevailing wage rates received by the classes of workers employed on projects similar to this Work and the applicable minimum wage rates are part of these Contract Documents. The Contractor and subcontractors shall keep an accurate record of the names and occupations of all persons employed by them in the construction of the Work and to show the actual per diem wages paid to each worker. These records are open to the inspection of the Owner.

END OF SECTION

III. BID FORM

To: Greater East End Management District

Work: **Landscape Improvements including: Sidewalks, Curb Ramps, Pavers, Planting, Irrigation, Installation of Owner Provided Fixtures**

Bidder _____
an individual proprietorship,
a corporation organized and existing under the
laws of _____
a partnership consisting of _____
_____,
having an address of _____
_____.

The undersigned bidder has carefully examined the CONTRACT DOCUMENTS for the work described above and the site of the Work and will provide at its own cost and expense all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, maintenance, and other accessories and services necessary to complete the Work upon which it bids, as provided by the CONTRACT DOCUMENTS, and binds itself on acceptance of its bid to enter into the Contract on the terms proposed by Owner for performing and completing the Work within the Contract Time, for the following prices.

The Contract time for Landscape Improvements: Contractor shall submit estimated time for in calendar days total completion of work: _____ **days.**

GRAND TOTAL LUMP SUM BID: $_____

(bid amount written)

All Bidders shall provide unit prices for all items included in the work. In the event a greater or lesser amount of work is done, the following unit prices will apply. Unit prices cover the cost of work and materials complete in place, including materials, equipment, labor, installation, delivery, taxes, overhead, profit, maintenance and guarantee required to render the same complete.

ITEM	QTY.	UNIT	ITEM	UNIT COST	EXTENSION
1.	1	LS	Mobilization and Permitting	$	$
2.	1	LS	Payment & Performance Bond	$	$
3.	575	SF	Provide & Install Concrete Pavers	$	$
4.	1	EA	Adjust Existing Grate Inlet Cover to New Grade	$	$
5.	116	SY	Removing and Disposing of Existing pavement, Concrete or Asphalt (Including All Thicknesses, Base and Subgrade, W/ or W/O Curb, All Depths)	$	$
6.	870	LF	Remove and Dispose of Existing Concrete Curb	$	$
7.	4	EA	Remove and Dispose of Type B-B Inlets	$	$
8.	25	LF	Remove and Dispose Storm Pipe 24-Inch Diameter Concrete Storm Sewer and Leads	$	$
9.	4	EA	Remove and Dispose of Cleanouts	$	$
10.	1	EA	Clearing and Grubbing	$	$
11.	1	EA	Remove and Relocate Water Meter With New Box	$	$
12.	17	TON	Lime for Lime Stabilized Subgrade, 6% Minimum	$	$
13.	662	SY	Lime Stabilized Subgrade, 6-Inch Thick	$	$
14.	81	TON	Hot Mix Asphaltic Concrete Pavement, Typed D, Over Concrete Side Walk (All Widths and Thicknesses)	$	$
15.	1,316	SY	6-Inch Reinforced Concrete Pavement	$	$
16.	870	LF	6-Inch Dowelled Concrete Curb and Gutter	$	$

ITEM	QTY.	UNIT	ITEM	UNIT COST	EXTENSION
17.	279	SF	Concrete Wheelchair ADA Sidewalk Ramp With Curbs And Pavers (All Types, Patterns And Colors, Per Plan Details)	$	$
18.	4	EA	Type B-B Inlet With Or Without Lock	$	$
19.	1	EA	Reinforced Concrete Junction Box With Lid	$	$
20.	4	EA	Connect Existing 6-Inch Drain Lines to Type B-B Inlets	$	$
21.	1	LS	Traffic Control & Regulation	$	$
22.	1	LS	Flagmen (Uniformed Peace Officer/16-Hr Per Week Min)	$	$
23.	20	LF	Inlet Protection Barrier (Gravel Bags)	$	$
24.	90	SY	Stabilized Construction Exit (Including Removal After Project Complete)	$	$
25.	1	LS	Cash Allowance TDLR Post Construction Inspection	$ 400.00	$ 400.00
26.	1	LS	Lighting and Electrical Complete & Operational, including Wiring, Connections, Street Bore, Conduit. Fixtures and Poles Provided by Owner	$	$
27.	1	EA	Install Owner Provided Bike Rack	$	$
28.	2	EA	Install Owner Provided Trash Receptacles	$	$
29.	1	LS	Drinking Fountian Complete & In Place, including Fountain, Water Line, PVB, and All Connections	$	
30.	1	LS	Tree Pruning	$	$
31.	1,500	SF	Install Owner Provided Re-claimed Clay Pavers	$	$
32.	1	EA	Monument & Dedication Plaque	$	$
33.	1	LS	Clean & Paint Existing Railing at Electrical Rack	$	$
34.	3	EA	Flared Curb Ramp with Pavers	$	$

ITEM	QTY.	UNIT	ITEM	UNIT COST	EXTENSION
35.	540	LF	Hand Rail	$	$
36.	1	LS	Irrigation System Complete & Operational	$	$
37.	8	EA	Natchez Crapemyrtle Single Trunk, 45 gal.	$	$
38.	7	EA	Natchez Crapemyrtle Multi-Trunk, 45 gal.	$	$
39.	13	EA	Cathedral Live Oak, 65 gal.	$	$
40.	264	EA	Butterfly Iris, 3 gal.	$	$
41.	102	EA	Red Yucca, 5 gal.	$	$
42.	70	EA	Dwarf Burford Holly, 5 gal.	$	$
43.	108	EA	Purple Lantana, 1 gal.	$	$
44.	126	EA	Miscanthus, 3 gal.	$	$
45.	63	EA	Indian Hawthorn, 5 gal.	$	$
46.	342	EA	Fig Ivy, 1 gal.	$	$
47.	1	LS	1-year Landscape Maintenance	$	$
48.	1	LS	Owner's Contingency Allowance	$ 25,000.00	$ 25,000.00
49.				$	$
50.				$	$
51.				$	$
TOTAL BASE BID					$

Bidder acknowledges receipt of the following addenda:

Addenda Number	Date of Addenda
_____	_____
_____	_____
_____	_____

_____
Name of Bidder

By _____
Name _____
Date _____

Surety Company _____
State of incorporation _____
Local agent _____
Agent's telephone _____

Insurance Carrier
State of incorporation _____
Local agent _____
Agent's telephone _____

III. A. BIDDER'S BOND

THAT WE, _____, as Principal,
(Bidder)
("Bidder"), and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the Greater East End Management District (GEEMD) in the sum of _____ Dollars ($_____) (an amount equal to 5 percent of the Total Bid Price, including Cash Allowances and Alternates, if any, for the payment of which sum, well and truly to be made to the GEEMD and its successors, the Bidder and Surety do bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Bidder has submitted on or about this day a proposal offering to perform the following:

_____

_____
(Project Name, Location and Number)
in accordance with the Drawings, Specifications, and terms and conditions related thereto to which reference is hereby made.

NOW, THEREFORE, if the Bidder's offer as stated in the Bid Form is accepted by the GEEMD, and the Bidder executes and returns to the GEEMD Agreement, required by the GEEMD, on the forms prepared by the GEEMD, for the Work and also executes and returns the same number of the Performance, Payment and Maintenance Bonds (such bonds to be executed by a Corporate Surety authorized by the State Board of Insurance to conduct insurance business in the State of Texas, and having an underwriting limitation in at least the amount of the bond) and other submittals as required by GEEMD, in connection with the Work, within the Contract Time, then this obligation shall become null and void; otherwise it is to remain in full force and effect.

If Bidder is unable to or fails to perform the obligations undertaken herein, the undersigned Bidder and Surety shall be liable to the GEEMD for the full amount of this obligation which is hereby acknowledged as the amount of damages which will be suffered by the GEEMD on account of the failure of such Bidder to perform such obligations, the actual amount of such damages being difficult to ascertain.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other Party at the address prescribed in the Contract documents, or at such other address as the receiving Party may hereafter prescribe by written notice to the sending Party.

IN WITNESS THEREOF, the Bidder and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

ATTEST, SEAL: (if a corporation)
WITNESS: (if not a corporation)

By: _____
Name:
Title:

_____
(Name of Bidder)

By: _____
Name:
Title:
Date:

ATTEST/SURETY WITNESS: (SEAL)

_____
(Full Name of Surety)

_____
(Address of Surety for Notice)

_____

_____
(Telephone Number of Surety)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

END OF DOCUMENT

IV. QUALIFICATION STATEMENT

1. Submit in a separate envelope than the bid a list of projects completed by Contractor during the last 5 years involving work of a similar type and comparable value. The list shall include:

   a. Names, addresses and telephone numbers of owner
   b. Name of project
   c. Location of project
   d. Brief description of work
   e. Contract amount
   f. Date of completion of contract
   g. Name, address and telephone number of engineer or architect for the project

2. Submit in a separate envelope than the bid a financial statement, references, and other information, sufficiently comprehensive, to permit appraisal of Contractor's current financial condition.

V. AGREEMENT FORM

1.0 - DEFINITIONS

A. Throughout this document and its attachment, reference is made to certain people and entities. In these cases, the following terms shall have the following meanings:

Architect: Means Landscape Architect or Owner's Representative in accordance with document's context

2.0 - AGREEMENT FORM

A. American Institute of Architects Standard Document No. A101-2007, Standard Form of Agreement between Owner and Contractor, is included by reference into this Project Manual, to the same extent as if bound in entirety herein.

B. A complete copy of the Standard Form of Agreement may be bound within a number of sets of the project manual following this page.

3.0 - AVAILABILITY

A. Printed copies of the Agreement may be examined in the Architect's office of may be obtained from the Houston Chapter of the American Institute of Architects, 315 Capitol, Suite 120, Houston, Texas 77002, 713-520-0155.

B. Failure to obtain and examine the Agreement in no way relieves the Contractor, Subcontractors, Sub-subcontractors, and material suppliers of responsibilities incorporated in the Agreement.

DRAFT

AIA® Document A101™ – 2007

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

«Greater East End Management District»« »
«3211 Harrisburg Blvd
Houston, TX 77003»
«Telephone Number: 713-928-9916»
«Fax Number: 713-928-2915»

and the Contractor:
(Name, legal status, address and other information)

«TBD »« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

«GEEMD-Paige St. Pocket Park & Trail»
«Houston, Texas»
« »

The Architect:
(Name, legal status, address and other information)

«Clark Condon Associates»« »
«10401 Stella Link
Houston, TX 77025»
«Telephone Number: 713-871-1414»
«Fax Number: 713-871-0888»

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™–2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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User Notes: (1782803564)

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ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.
(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

«Date will be fixed in a Notice to Proceed. »

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other security interests, the Owner's time requirement shall be as follows:

«N/A »

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than « » (« ») days from the date of commencement, or as follows:
(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

«TBD »

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Portion of Work	Substantial Completion Date

, subject to adjustments of this Contract Time as provided in the Contract Documents.
(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

« »

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be « » ($ « »), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

«N/A »

§ 4.3 Unit prices, if any:
(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price Per Unit ($0.00)
See attached Bid Form		

§ 4.4 Allowances included in the Contract Sum, if any:
(Identify allowance and state exclusions, if any, from the allowance price.)

Item	Price
Cash Allowance TDLR Post Construction Inspection	$400.00
Owner's Contingency Allowance	$25,000.00

ARTICLE 5 PAYMENTS

§ 5.1 PROGRESS PAYMENTS

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

« »

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the «25th » day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the «5th » day of the «following » month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than «thirty » («30 ») days after the Architect receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract

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Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of «ten » percent («10 » %). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201™–2007, General Conditions of the Contract for Construction;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of «ten » percent («10 » %);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and
(Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.8 Reduction or limitation of retainage, if any, shall be as follows:
(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

« »

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

« »

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ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 INITIAL DECISION MAKER

The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A201–2007, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

« »
« »
« »
« »

§ 6.2 BINDING DISPUTE RESOLUTION

For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A201–2007, the method of binding dispute resolution shall be as follows:
(Check the appropriate box. If the Owner and Contractor do not select a method of binding dispute resolution below, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.)

[« »] Arbitration pursuant to Section 15.4 of AIA Document A201–2007

[«X»] Litigation in a court of competent jurisdiction

[« »] Other *(Specify)*

« »

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2007.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2007.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

«0- » % « »

§ 8.3 The Owner's representative:
(Name, address and other information)

«Robert Fiederlein
Greater East End Management District »
«3211 Harrisburg Blvd
Houston, TX 77003»
«713-928-9916- »
« »
« »
« »

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§ 8.4 The Contractor's representative:
(Name, address and other information)

«TBD »
« »
« »
« »
« »
« »

§ 8.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions:

« »

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201–2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
Project Manual	Paige Street Pocket Park & Trail	June 2013	

§ 9.1.4 The Specifications:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)
«Project Manual - Paige Street Pocket Park & Trail »

Section	Title	Date	Pages

§ 9.1.5 The Drawings:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)
« »

Number	Title	Date
	Cover	6/7/2013
L1.00	Overall Plan	6/7/2013
C1	12-Ft. Sidewalk Enhancement	6/7/2013
C2	Traffic Control Plan	6/7/2013
C3	Notes and Detail	6/7/2013
L1.01-L1.02	Construction Plan	6/7/2013
L1.03-L1.04	Construction Details	6/7/2013
S1.00	Structural Details and Notes	6/7/2013
E0.01	Electrical Schedules, Notes & Details	6/7/2013

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E1.01	Electrical Lighting Plan	6/7/2013
L2.01-L2.02	Irrigation Plan	6/7/2013
L2.03	Irrigation Details	6/7/2013
L3.01-L3.02	Planting Plan	6/7/2013
L3.03	Planting Details	6/7/2013

§ 9.1.6 The Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 9.

§ 9.1.7 Additional documents, if any, forming part of the Contract Documents:

.1 AIA Document E201™–2007, Digital Data Protocol Exhibit, if completed by the parties, or the following:

« »

.2 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2007 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor's bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)

«Invitation to Bidders
Instruction to Bidders
Completed Bid Form »

ARTICLE 10 INSURANCE AND BONDS

The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201–2007.
(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2007.)

Type of insurance or bond	Limit of liability or bond amount ($0.00)
Payment Bond	100% of contract amount
Performance Bond	100% of contract amount
Insurance	Set forth in the General Conditions to this Contract
Workers Compensation	Set forth in the General Conditions to this Contract

ARTICLE 11 FEDERAL COMPLIANCE

The Owner has received funding for various Owner projects through federal stimulus funding by the Federal Transit Administration (the "FTA"). In accordance with such award of funds, the Owner is capturing the dollars it spends on other projects in the District, including this Work, as the Owner's share of matching funds required of it under the grant. Therefore, all aspects of the Work and this Agreement are subject to all rules and regulations of the FTA as they apply to the use of the stimulus funds. Contractor agrees to comply with items and/or complete the required documents set forth on Exhibit "A" of Attachment to Special Conditions of the Contract and made a part hereof for all purposes. Contractor agrees that it is familiar with and can perform the requirements of the FTA.

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This Agreement entered into as of the day and year first written above.

OWNER *(Signature)*	CONTRACTOR *(Signature)*
« »« »	« »« »
(Printed name and title)	*(Printed name and title)*

DRAFT

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VI. BID PROTEST PROCEDURES

The following procedures (these "Bid Protest Procedures") are intended to comply with FTA requirements. The Bid Protest Procedures apply only to construction projects (i) for which the Greater East End Management District ("GEEMD") is the owner named in the construction contract for the project and (ii) that will be funded in whole or in part by FTA funds.

PRO-01 FILING OF PROTESTS

A. All Protests must be filed and resolved in a manner consistent with the requirements of FTA Circular 4220.1E Third Party Contracting Guidelines (available for download at http://www.fta.dot.gov/laws/circulars/leg_reg_4063.html) and the Bid Protest Procedures. Upon request, the Special Projects Manager for the Bid will provide a copy of either of the aforementioned documents.

B. Terms used in the Bid Protest Procedures and not defined elsewhere in the Bid Protest Procedures are defined below in Section PRO-02.

PRO-02 PROTEST DEFINITIONS

The following definitions shall only apply to protest an issue of solicitation or award arising in connection with the Bid:

Appeal - Protestor's written summary describing the basis for appeal, provided to the Special Projects Manager when requesting reconsideration of the Special Project Manager's Protest denial.

Bid – a bid pursuant to which a bidder offers to perform the work of the Contract.

Contract – the contract for which Bids are sought.

Executive Director – the Executive Director of the GEEMD.

FTA – the Federal Transit Administration of the United States Department of Transportation.

Interested Party – Actual or prospective bidder whose direct economic interest would be affected by the award of the Contract or by the failure to award the Contract.

Prospective Bidder – Any bidder that has the actual capability and capacity to submit a bid meeting all the requirements set forth herein and in the bid documents bid or to be bid upon.

Protest – A succinct written description of the Protestor's objections to the content of a solicitation or award of a Contract.

Protestor – An Interested Party that has properly filed a timely Protest.

Special Projects Manager – the Special Projects Manager of GEEMD.

Timely Filed Protest – A written document filed by a Protestor that meets the requirements outlined in Section PRO-03 below and the instructions to bidders applicable to the Bid.

PRO-03 **PROTEST REQUIREMENTS**

A. In order for a Protest to be considered, the Protestor shall provide a written submission which shall contain at a minimum:

1. Name and address of the Protestor;

2. Protestor's relationship to the procurement sufficient to establish that the Protest is being filed by an Interested Party;

3. Written proof that the Protest has been filed in a timely manner;

4. The specific Contract for which the solicitation or award is being protested pursuant to these Bid Protest Procedures;

5. The specific staff recommendation, board action, or inaction that is being protested;

6. The provision(s) of the solicitation, regulations, and/or laws upon which the Protest is based (*i.e.*, identification of the technical specifications or item of content in the solicitation);

7. All documentation supporting the allegations of the Protest; and

8. A statement of the specific relief requested.

If the Protest does not comply with any of the preceding requirements, it may not be considered for evaluation and may be returned to the Protestor.

B. At the Protestor's discretion, a Protest may be filed by facsimile (with original copy mailed by certified mail return receipt requested) or by any other return receipt means. GEEMD is not responsible for lost or delayed deliveries. A Protest not filed within the time limits herein may be rejected without consideration or evaluation.

C. To be considered timely, Protests concerning the content of a Bid, including all attached documents must be filed with the Special Projects Manager within ten (10) calendar days after GEEMD first issues the Bid and received by the Special Projects Manager not later than 5:00 p.m. (local time) on such tenth calendar day. If the tenth calendar day falls on a weekend or legal holiday, the Protest period ends at 5:00 p.m. (local time) the following business day.

D. The Special Projects Manager shall issue a written decision on a content based Protest prior to the deadline for submission of Bids.

E. Protests concerning a recommendation for award or on any ground not based upon the content of the Bid must be filed with the Special Projects Manager by an Interested Party within fifteen (15) calendar days after GEEMD awards the contract and must be received by the Special Projects Manager not later than 5:00 p.m. (local time). If the fifteenth calendar day falls on a weekend or legal holiday, the Protest period ends at 5:00 p.m. (local time) the following business day.

F. GEEMD will acknowledge only one Protest per Protestor based on Bid content and only one Protest per Protestor not based on Bid content.

G. An Appeal to the Executive Director concerning a denial to a Protest must be filed by an Interested Party within seven (7) calendar days after the denial of the Protest.

H. The date of filing of a Protest or Appeal is the date of receipt of the Protest or Appeal by the Special Projects Manager.

I. All Protests must be filed in writing with:

Special Projects Manager
GEEMD
3211 Harrisburg
Houston, Texas 77003

No other location or addressee is acceptable.

J. All Appeals must be filed in writing with:

Executive Director
c/o Special Projects Manager
GEEMD
3211 Harrisburg
Houston, Texas 77003

Note: Appeals addressed to the Executive Director, c/o the Special Projects Manager, must be delivered to the Special Projects Manager for date and time stamping.

K. GEEMD will respond to each substantive issue raised in all timely filed Protests. The Special Projects Manager shall make a written determination of the Protest, within forty-five (45) calendar days from receipt of Protest. Any decision rendered by the Special Projects Manager may be appealed to the Executive Director for a final decision which must be rendered within thirty (30) calendar days from receipt of Appeal.

L. The Protestor may withdraw its Protest or Appeal at any time before the Executive Director issues a final decision.

PRO-04 **APPEALS TO THE FTA**

A. If the requirements of the Bid are federally funded and all administrative remedies described above have been exhausted, a Protestor may file a Protest with the FTA. FTA appeal reviews will be limited to failure to comply with these Bid Protest Procedures or violations of Federal law or regulation.

B. All appeals to the FTA must be submitted to the following FTA Regional Office:

Federal Transit Administration
819 Taylor Street
Room 8A36

Fort Worth, TX 76102
Regional Administrator Region VI
Phone: (817) 978-0550
Fax: (817) 978-0575

C. All appeals to the FTA must be submitted within seven (7) calendar days after a final decision with respect to the Protest has been rendered by the Executive Director.

VII. GENERAL CONDITIONS OF THE CONTRACT

1.0 - DEFINITIONS

A. Throughout this document and its attachment, reference is made to certain people and entities. In these cases, the following terms shall have the following meanings:

Architect: Means Landscape Architect or Owner's Representative in accordance with document's context

2.0 - GENERAL CONDITIONS

A. American Institute of Architects Standard Document No. A201-2007, General Conditions of the Contract for Construction, is included by reference into this Project Manual, to the same extent as if bound in entirety herein.

3.0 - AVAILABILITY

A. Printed copies of the General Conditions may be examined in the Architect's office of may be obtained from the Houston Chapter of the American Institute of Architects, 315 Capitol, Suite 120, Houston, Texas 77002, 713-520-0155.

B. Failure to obtain and examine the Agreement in no way relieves the Contractor, Subcontractors, Sub-subcontractors, and material suppliers of responsibilities incorporated in the Agreement.

4.0 - MODIFICATION

A. Modification of certain provisions of the General Conditions may be found in the Supplementary Conditions of the Contract found herein.

VIII. SPECIAL CONDITIONS OF THE CONTRACT

The following supplements modify the "General Conditions of the Contract for Construction," AIA Document A201, 2007 Edition. Where a portion of the General Conditions is modified or deleted by these Supplementary conditions, the unaltered portions of the General Conditions shall remain in effect.

ARTICLE 1 - GENERAL PROVISIONS

A. Add the following to subparagraph 1.1:

1.1.9 Technical Words: Technical terms not defined in these Contract Documents shall have the meanings given in the American Institute of Architects' fourteenth edition of The Construction Specifications Institute's "Manual of Practice" 1997 edition. Terms not defined as above and used to describe materials and/or Work, and which so applied have a well-known technical or trade meaning, shall be held to have such recognized meaning.

1.1.10 Should there be a conflict within the Specifications, Contract Drawings, and the Working Drawings, the Landscape Architect will decide which stipulation provides the best installation and the decision will be final. In the Working Drawings, drawings of larger scale take precedence over those of smaller scale; figured dimensions over scaled dimensions, and note entries over graphic indications.

1.1.11 The Contractor shall notify the Owner and/or Architect of any condition he finds where, in his judgment, it would be desirable to modify the requirements to produce the best results. If Contractor fails to so notify the Owner and/or Architect, or if he modifies the Work in a manner not approved by the Owner and/or Architect in writing, the Contractor assumes sole responsibility for satisfactory results. Should any error or inconsistency appear in the Construction Documents, or in the Work done by others affecting this Work, the Owner and/or Architect shall be notified at once and will issue instructions as to procedure.

If, after notifying the Owner and/or Architect of such error or inconsistency, the Contractor proceeds with the Work so affected without further instructions from the Owner and/or Architect, the Contractor shall rectify any resulting damage or defects. This includes typographical errors in the Specifications and notational errors on the Drawings where doubtful of interpretation.

ARTICLE 3 - CONTRACTOR

A. Add the following to paragraph 3.1:

3.1.4 The Contractor represents and warrants by submission of a proposal that he is financially solvent, and that he is experienced in and competent to perform the type of Work and to furnish the plant materials, supplies, and equipment, to be so performed or furnished by him. The Contractor represents and warrants by submission of a proposal that he is familiar with all Federal, State, Municipal and County laws, ordinances and regulations which may in any way affect the Work or those employed therein, including but not limited to, any special acts relating to the Work or to the project of which it is a part.

B. Supplement Paragraph 3.2.1 with the following:

3.2.1.1 Omissions and Misdescriptions: Omissions from the Drawings or Specifications or the misdescription of details of Work which are manifestly necessary to carry out the intent of the Drawings and Specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details to the Work, but they shall be performed as if fully and correctly set forth and described in the Drawings and/or Specifications.

3.2.1.2 Discrepancies: Contractor shall carefully examine all Drawings Specifications and other information given to the Contractor by the Owner and/or Architect as to the materials and methods of construction. The Contractor shall consult with the Owner and/or Architect should any error or inconsistency develop in the Drawings and/or Specifications, and in no case shall the Contractor proceed with the Work uncertainly.

3.2.1.3 Examination of the Site: The Contractor shall be held responsible for having examined the project site, to have compared it with the Drawings and Specifications, to have carefully examined the Contract Documents, and to have satisfied himself as to the conditions under which the Work shall be performed before submitting a proposal. No allowance or additional compensation will subsequently be made in behalf of the Contractor on account of his neglect or failure to acquaint himself with the conditions of the site and of the streets approaching the site.

3.2.1.4 Wherever there are discrepancies between the Drawings and Specifications, the Contractor shall estimate upon the better quality or greater quantity of material or Work called for, and it shall be so furnished unless otherwise ordered in writing.

C. Add the following to paragraph 3.5:

3.5.1 The Contractor shall execute and deliver, before final payment, a written warranty in approved form, that labor, materials and equipment furnished and Work performed are in accordance with the Contract Drawings and Specifications and authorized alterations and additions thereto; and that, should any defect develop during the Contract Warranty Period, as defined, due to improper materials, workmanship and/or arrangement, the same, together with any Work affected in correcting such defect and/or any Work damaged as a result of such defect, shall upon written notice, be satisfactorily repaired or replaced by the Contractor at no additional cost to the Owner.

3.5.2 Work Covered by Warranty: The Contractor's Warranty shall cover all Work under the Contract, whether or not any portion or trade has been assigned or sublet. In the event any portion of the Work is performed by assignees and subcontractors, their written Warranty to the Owner covering their respective portions of the Work for the periods required shall be delivered, together with the Contractor's Warranty, to the Owner. Assignee's and subcontractor's Warranties shall expressly provide that the same shall be enforceable directly by the Owner, if he so elected, and shall run concurrently with the Contractor's Warranty.

3.5.3 Warranty Period: The Warranty Period will be 1 year from date of Substantial Completion.

D. Add the following to paragraph 3.8:

3.8.4 Work specified to be accomplished under cash allowances shall not be purchased or started until Contractor has submitted firm prices for the Work to the Owner and has received written instructions from the Owner to proceed with the Work.

E. Add the following to paragraph 3.10:

3.10.4 Liquidated Damages: The Contractor shall pay liquidated damages of $500.00 per day.

F. Add the following to paragraph 3.18:

3.18.3 Contractor shall assume all risks of loss or damage to, or destruction of, the Work or any part thereof, including Owner-furnished materials and equipment which is to be incorporated in the Work, from any cause, excepting loss, damage, or destruction insured under Article II which occurs prior to the completion and acceptance of the Work. The Contractor shall be responsible for damages that may occur to the adjoining improvements or streets, and or an accident to any person or persons in and about the construction site or adjacent streets, and for damages done to adjoining property or the Work of others during the progress of the Work under the Contract. The Contractor shall defend and save harmless, the Owner and the Landscape Architect from actions, suits, or other legal proceedings that may be instituted on such claims or demand.

ARTICLE 5 - SUBCONTRACTORS

A. Add the following to paragraph 5.3:

5.3.1 The Landscape Architect's approval or disapproval of any subcontractor will not relieve the Contractor of his responsibility for the performance of the Work as called for under the Contract Documents nor will approval of a particular process or material. Such approval shall not be construed to create any contractual relationship with any subcontractor, and either the Owner or Landscape Architect.

ARTICLE 8 - TIME

A. Add the following to paragraph 8.2:

8.2.4 Contractor shall achieve Substantial Completion on the date set forth in the Contract. Owner will consider the number of days required for completion in the awarding of the Contract.

ARTICLE 9 - PAYMENTS AND COMPLETION

A. Add the following to paragraph 9.4:

9.4.3 Payment applications, approved and certified by the Architect through the issuance of a payment certificate, will be paid to the Contractor within 30 days after the Owner receives the approved application from the Architect. Payment Applications

may be submitted once a month. In addition, the Contractor shall include with each application for payment an affidavit of bills paid up to the date of the application and a partial release of lien, from the Contractor and all Subcontractors and suppliers for which payment is requested. Payment application which requests payment for materials or equipment which are stored at the site or at some other location agreed upon in writing by the Architect will not be approved by the Architect until the Contractor submits bills of sale or such other acceptable evidence that will establish the Owner's title to such materials or otherwise adequately protect the Owner's interest including applicable insurance. In addition, the Contractor shall, if and when required by the Architect, support his right to payment with receipts or other vouchers showing payments for material and labor, payments to subcontractors or such other evidence as the Architect may require. Submittal of an application for payment signed by the Contractor or his legally authorized representative shall constitute a certificate that the payment application represents the true cost of Work performed and that 90% of all indebtedness incurred in all previous payment periods has been paid by him. Upon Substantial Completion of the project Work, 90% of the contract amount will be payable to the Contractor. The remaining 10% retainage will be payable to him 60 days after Final Completion of the project by the Owner as recommended by the Architect.

B. Add the following to paragraph 9.8:

9.8.6 Owner reserves right to occupy, without prejudice to right of either party, completed or substantially completed portions of Improvements under this Contract, prior to final completion of Contract. Such occupancy shall not be construed as final acceptance of the Work.

ARTICLE 11 - INSURANCE

A. Delete Paragraphs 11.1.1 through 11.1.4 and insert the following:

11.1.1 Prior to and at all times during the performance of the Work, Contractor shall provide, and shall require all subcontractors of every tier to provide, the insurance coverages described below on policy forms and with insurance carriers acceptable to Owner and with limits not less than those shown below, all of which shall be provided at the sole cost of Contractor and such subcontractors:

1) **Commercial General Liability**
   a) Commercial General Liability with limits of insurance of not less than $1,000,000 Each Occurrence, $2,000,000 Products/Completed Operations Aggregate, $1,000,000 Personal & Advertising Injury, $1,000,000 Fire Damage Limit (any one fire), $5,000 Medical Expense (any one person) and $2,000,000 General Aggregate.
   b) Commercial General Liability coverage shall cover liability arising from premises, operations, independent contractors, products-completed operations, and personal and advertising injury.
   c) Owner and Landscape Architect shall be included as additional insureds on the Commercial General Liability. This insurance for the additional insureds shall be as broad as the coverage provided for the named insured Contractor. It shall apply as primary and non-contributory insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insureds.
   d) Contractor shall maintain Commercial General Liability coverage for itself and Owner for the duration of the project and maintain Completed Operations and Products Liability coverage for itself and each additional insured for at least 2 years after completion of the Work.

2) **Automobile Liability**
   a) Business Auto Liability with limits of at least $1,000,000, Bodily Injury and Property Damage each accident Combined Single Limit.
   b) Business Auto coverage must include coverage for liability arising out of all owned, leased, hired and non-owned automobiles.
   c) Owner and Landscape Architect shall be included as additional insureds on the auto policy. This insurance for the additional insureds shall be as broad as the coverage for the named insured Contractor.

3) **Commercial Umbrella/Excess Liability**
   a) Umbrella limits must be at least $1,000,000 each occurrence, and $1,000,000 Aggregate.
   b) Umbrella coverage must include Owner and Landscape Architect as additional insureds on the Commercial General Liability and the Auto Liability.
   c) Umbrella coverage for such additional insureds shall apply as primary and non-contributory insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured other than the Commercial General Liability and Auto Liability coverages maintained by the Contractor.

4) **Workers Compensation and Employer Liability**
   a) Workers Compensation with statutory limits for state in which work is performed.
   b) Employers Liability Insurance limits of at least $500,000 each accident for bodily injury by accident and $500,000 each employee for bodily injury by disease.
   c) Where applicable, U.S. Longshore and Harbor Works Compensation Act Endorsement shall be attached to the policy.
   d) Where applicable, the Maritime Coverage Endorsement shall be attached to the policy.

5) **Waiver of Subrogation**
   Contractor's Commercial General Liability, Automobile Liability, Umbrella Liability and Workers' Compensation policies shall be endorsed to waive all rights against Owner and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by commercial general liability, commercial umbrella liability, business auto liability or workers compensation and employers liability insurance.

6) **Notification of Cancellation, Non-Renewal or Material Change in Coverage**
   Contractor's Commercial General Liability, Automobile Liability, Umbrella Liability and Workers' Compensation policies shall be endorsed to state that Owner will be notified at least 30 days in advance in the event of cancellation, non-renewal or material change in coverage of said policies, and the Contractor will replace "will endeavor" with "must notify" in their Certificate of Insurance.

7) **Certificate of Insurance**
   Contractor shall provide Owner with valid certificate of insurance prior to commencement of Work verifying said insurance requirements have been met. Attached to each certificate of insurance shall be a copy of the Additional Insured Endorsement that is part of the Contractor's Commercial General Liability Policy, Auto Liability Policy and Umbrella/Excess Liability Policy.

11.1.2 If requested to do so by Owner, Contractor shall also furnish the originals or certified copies of the insurance policies for inspection. Such policies shall be subject to the approval of Owner as to adequacy. Should Contractor fail to procure

or to maintain in force the insurance specified herein, Owner may secure such insurance and the cost thereof shall be borne by Contractor. Contractor agrees to reimburse Owner the cost of any such insurance plus a five percent (5%) administrative charge within ten (10) days after billing by the Owner. Any sum remaining unpaid fifteen (15) days after billing by Owner shall bear interest at the rate of twelve percent (12%) per annum until paid to Owner.

11.1.3 Contractor's compliance with the provisions above and the limits of liability shown for each of the insurance coverages to be provided by Contractor shall not be deemed to constitute a limitation of Contractor's liability for the Claims or in any way limit, modify or otherwise affect the Contractor's Contractual indemnification obligations. The insolvency, bankruptcy, or failure of any insurance company carrying insurance for Contractor or any subcontractor, or the failure of any insurance company to pay claims accruing shall not be held to waive any of the provisions of this Contract.

B. Delete Paragraphs 11.3.1 through 11.3.10

C. Add the following to paragraph 11.4:

11.4.3 Contractor shall provide surety bonds on forms acceptable to Owner covering faithful performance of the Contract and payment of obligations arising thereunder as required in the Contract Documents pursuant to Chapter 2253 of the Texas Government Code as amended, in the amount of 100 percent of the Contract Price as stipulated in Contract Documents on the date of execution of the Contract, in accordance with the conditions stated on the Performance and Payment Bonds. Bonds may be obtained from the Contractor’s usual source and cost thereof shall be included in the Contract Price.

END OF SECTION

VIII. A. ATTACHMENT TO SPECIAL CONDITIONS OF THE CONTRACT

1.0 - FEDERAL COMPLIANCE

A. The Owner has received funding for this project from the Federal Transit Administration (the FTA). In accordance with such award of funds, all aspects of the Work and this Agreement are subject to all rules and regulations of the FTA as the apply to the use of the grant funds. Contractor agrees to comply with items and/or complete the required documents set forth on Exhibit "A" attached hereto and made a part hereof for all purposes. Contractor agrees that it is familiar with and can perform the requirements of the FTA.

B. Exhibit "A" follows this Section and comprises a total of 53 pages.

2.0 - FEDERAL WAGE RATES

A. The Greater East End Management District is the contracting agency for this construction project. The following statute requires the contracting agency to specify the generally minimum rates of wages in contracts that are bid: Government Code 2258 "Construction of Public Works in State and Municipal or Political Subdivisions; Prevailing Wage Rates to be maintained."

Pursuant to the requirements of this statute, we have determined that the following rates of wages are paid to various classifications of workers in the locality of this project.

Total hourly compensations to each worker must equal or exceed the minimum wage rates stated in the following attachment. Contributions by a worker toward health, pension, vacation, and the like are part of the worker's pay; contributions by the employer are not.

All hours of work over 40 hours per week are overtime and will be compensated at the rate of 1 and 1/2 times the regular rate.

Trainees/helpers, where not otherwise specified above, may be compensated at a rate determined mutually by the worker and employer, commensurate with the experience and skill of the worker but a rate not less than 60% of the journeyman's wage or less than the Laborers rate. At no time shall a journeyman supervise more than two of apprentices, trainees, or helpers. All apprentices/trainees/helpers shall be under the direct supervision of a journeyman working as a crew.

B. Exhibit "B" Attached hereto and made a part of this Contract lists the Federal Wage Rates for Highway Construction for the State of Texas.

C. Exhibit "B" comprises a total of 5 pages.

EXHIBIT "A"

FEDERAL TRANSIT ADMINISTRATION

Contract Provisions, Certifications, Reports, Forms

All items below that are checked are made a part of this Agreement with the Owner (also referred to as District or Recipient), and _____ (sometimes referred to below as Contractor, Offeror or Subrecipient), and its subcontractors and/or subconsultants must comply with the provisions as indicated herein.

- ☒ 1. Fly America Requirements
- ☒ 2. Buy America Requirements
- ☐ 3. Charter Bus and School Bus Requirements
- ☒ 4. Cargo Preference Requirements
- ☒ 5. Seismic Safety Requirements
- ☒ 6. Energy Conservation Requirements
- ☒ 7. Clean Water Requirements
- ☐ 8. Bus Testing
- ☐ 9. Pre-Award and Post Delivery Audit Requirements
- ☒ 10. Lobbying
- ☒ 11. Access to Records and Reports
- ☒ 12. Federal Changes
- ☒ 13. Bonding Requirements
- ☒ 14. Clean Air
- ☒ 15. Recycled Products
- ☒ 16. Davis-Bacon and Copeland Anti-Kickback Acts
- ☒ 17. Contract Work Hours and Safety Standards Act
- ☐ 18. [Reserved]
- ☒ 19. No Government Obligation to Third Parties
- ☒ 20. Program Fraud and False or Fraudulent Statements and Related Acts
- ☒ 21. Termination
- ☒ 22. Government-wide Debarment and Suspension (Nonprocurement)
- ☒ 23. Privacy Act
- ☒ 24. Civil Rights Requirements
- ☒ 25. Breaches and Dispute Resolution

☐ 26. Patent and Rights in Data

☐ 27. Transit Employee Protective Agreements

☒ 28. Disadvantaged Business Enterprises (DBE)

☐ 29. [Reserved]

☒ 30. Incorporation of Federal Transit Administration (FTA) Terms

☐ 31. Drug and Alcohol Testing

☒ 32. ADA Access

For convenience, the following forms have been reproduced at the end of this attachment:

A. Buy America Certification.
B. Certification Regarding Lobbying
C. Certification Regarding Debarment
D. Schedule Of DBE Participation
E. Letter Of Intent To Perform As A Subcontractor

1. FLY AMERICA REQUIREMENTS
49 U.S.C. § 40118
41 CFR Part 301-10

Applicability to Contracts
The Fly America requirements apply to the transportation of persons or property, by air, between a place in the U.S. and a place outside the U.S., or between places outside the U.S., when the FTA will participate in the costs of such air transportation. Transportation on a foreign air carrier is permissible when provided by a foreign air carrier under a code share agreement when the ticket identifies the U.S. air carrier's designator code and flight number. Transportation by a foreign air carrier is also permissible if there is a bilateral or multilateral air transportation agreement to which the U.S. Government and a foreign government are parties and which the Federal DOT has determined meets the requirements of the Fly America Act.

Flow Down Requirements
The Fly America requirements flow down from FTA recipients and subrecipients to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are in compliance.

Fly America Requirements
The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

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2. BUY AMERICA REQUIREMENTS
49 U.S.C. 5323(j)
49 CFR Part 661

Applicability to Contracts
The Buy America requirements apply to the following types of contracts: Construction Contracts and Acquisition of Goods or Rolling Stock (valued at more than $100,000).

Flow Down
The Buy America requirements flow down from FTA recipients and subrecipients to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are in

compliance. The $100,000 threshold applies only to the grantee contract, subcontracts under that amount are subject to Buy America.

Buy America - The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification (below) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 C.F.R. Part 661.5.

Date _____

Signature _____

Company Name _____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Date _____

Signature _____

Company Name _____

Title _____

Certification requirement for procurement of buses, other rolling stock and associated equipment.

Certificate of Compliance with 49 U.S.C. 5323(j)(2)(C).

The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 C.F.R. Part 661.11.

Date _____

Signature _____

Company Name _____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11, but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 CFR 661.7.

Date _____

Signature _____

Company Name _____

Title _____

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3. CHARTER BUS REQUIREMENTS
49 U.S.C. 5323(d)
49 CFR Part 604

Applicability to Contracts
The Charter Bus requirements apply to the following type of contract: Operational Service Contracts.

Flow Down Requirements
The Charter Bus requirements flow down from FTA recipients and subrecipients to first tier service contractors.

Charter Service Operations - The contractor agrees to comply with 49 U.S.C. 5323(d) and 49 CFR Part 604, which provides that recipients and subrecipients of FTA assistance are prohibited from providing charter service using federally funded equipment or facilities if there is at least one private charter operator willing and able to provide the service, except under one of the exceptions at 49 CFR 604.9. Any charter service provided under one of the exceptions must be "incidental," i.e., it must not interfere with or detract from the provision of mass transportation.

3. SCHOOL BUS REQUIREMENTS
49 U.S.C. 5323(F)
49 CFR Part 605

Applicability to Contracts
The School Bus requirements apply to the following type of contract: Operational Service Contracts.

Flow Down Requirements
The School Bus requirements flow down from FTA recipients and subrecipients to first tier service contractors.

School Bus Operations - Pursuant to 69 U.S.C. 5323(f) and 49 CFR Part 605, recipients and subrecipients of FTA assistance may not engage in school bus operations exclusively for the transportation of students and school personnel in competition with private school bus operators unless qualified under specified exemptions. When operating exclusive school bus service under an allowable exemption, recipients and subrecipients may not use federally funded equipment, vehicles, or facilities.

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4. CARGO PREFERENCE REQUIREMENTS
46 U.S.C. 1241
46 CFR Part 381

Applicability to Contracts
The Cargo Preference requirements apply to all contracts involving equipment, materials, or commodities which may be transported by ocean vessels.

Flow Down
The Cargo Preference requirements apply to all subcontracts when the subcontract may be involved with the transport of equipment, material, or commodities by ocean vessel.

Cargo Preference - Use of United States-Flag Vessels - The contractor agrees: a. to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for

shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of -lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading.) c. to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

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5. SEISMIC SAFETY REQUIREMENTS
42 U.S.C. 7701 et seq. 49
CFR Part 41

Applicability to Contracts
The Seismic Safety requirements apply only to contracts for the construction of new buildings or additions to existing buildings.

Flow Down
The Seismic Safety requirements flow down from FTA recipients and subrecipients to first tier contractors to assure compliance, with the applicable building standards for Seismic Safety, including the work performed by all subcontractors.

Seismic Safety - The contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The contractor also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

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6. ENERGY CONSERVATION REQUIREMENTS
42 U.S.C. 6321 et seq.
49 CFR Part 18

Applicability to Contracts
The Energy Conservation requirements are applicable to all contracts.

Flow Down
The Energy Conservation requirements extend to all third party contractors and their contracts at every tier and subrecipients and their subagreements at every tier.

Energy Conservation - The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

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7. CLEAN WATER REQUIREMENTS
33 U.S.C. 1251

Applicability to Contracts
The Clean Water requirements apply to each contract and subcontract which exceeds $100,000.

Flow Down
The Clean Water requirements flow down to FTA recipients and subrecipients at every tier.

Clean Water - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

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8. BUS TESTING
49 U.S.C. 5323(c)
49 CFR Part 665

Applicability to Contracts
The Bus Testing requirements pertain only to the acquisition of Rolling Stock/Turnkey.

Flow Down
The Bus Testing requirements should not flow down, except to the turnkey contractor as stated in Master Agreement.

Bus Testing - The Contractor [Manufacturer] agrees to comply with 49 U.S.C. A 5323(c) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

1) A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle.

2) A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

4) If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

CERTIFICATION OF COMPLIANCE WITH FTA'S BUS TESTING REQUIREMENTS
The undersigned [Contractor/Manufacturer] certifies that the vehicle offered in this procurement complies with 49 U.S.C. A 5323(c) and FTA's implementing regulation at 49 CFR Part 665.

The undersigned understands that misrepresenting the testing status of a vehicle acquired with Federal financial assistance may subject the undersigned to civil penalties as outlined in the Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Date: _____

Signature: _____

Company Name: _____

Title: _____

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9. PRE-AWARD AND POST DELIVERY AUDITS REQUIREMENTS

49 U.S.C. 5323
49 CFR Part 663

Applicability to Contracts
These requirements apply only to the acquisition of Rolling Stock/Turnkey.

Flow Down

These requirements should not flow down, except to the turnkey contractor as stated in Master Agreement.

- Buy America certification is mandated under FTA regulation, "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 C.F.R. 663.13.

-- Specific language for the Buy America certification is mandated by FTA regulation,

"Buy America Requirements--Surface Transportation Assistance Act of 1982, as amended,"

49 C.F.R. 661.12, but has been modified to include FTA's Buy America requirements codified at 49 U.S.C. A 5323(j).

Pre-Award and Post-Delivery Audit Requirements - The Contractor agrees to comply with 49 U.S.C. § 5323(l) and FTA's implementing regulation at 49 C.F.R. Part 663 and to submit the following certifications:

(1) Buy America Requirements: The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Bidder/Offeror certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

(2) Solicitation Specification Requirements: The Contractor shall submit evidence that it will be capable of meeting the bid specifications.

(3) Federal Motor Vehicle Safety Standards (FMVSS): The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

BUY AMERICA CERTIFICATE OF COMPLIANCE WITH FTA REQUIREMENTS
FOR BUSES, OTHER ROLLING STOCK, OR ASSOCIATED EQUIPMENT

(To be submitted with a bid or offer exceeding the small purchase threshold for Federal assistance programs, currently set at $100,000.)

Certificate of Compliance

The bidder hereby certifies that it will comply with the requirements of 49 U.S.C. Section 5323(j)(2)(C), Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 C.F.R. 661.11:

Date: _____

Signature: _____

Company Name: _____

Title: _____

Certificate of Non-Compliance

The bidder hereby certifies that it cannot comply with the requirements of 49 U.S.C. Section 5323(j)(2)(C) and Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, but may qualify for an exception to the requirements consistent with 49 U.S.C. Sections 5323(j)(2)(B) or (j)(2)(D), Sections 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act, as amended, and regulations in 49 C.F.R. 661.7.

Date: _____

Signature: _____

Company Name: _____

Title: _____

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10. LOBBYING
31 U.S.C. 1352
49 CFR Part 19
49 CFR Part 20

Applicability to Contracts
The Lobbying requirements apply to Construction/Architectural and Engineering/Acquisition of Rolling Stock/Professional Service Contract/Operational Service Contract/Turnkey contracts.

Flow Down
The Lobbying requirements mandate the maximum flow down, pursuant to Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352(b)(5) and 49 C.F.R. Part 19, Appendix A, Section 7.

Mandatory Clause/Language

Clause and specific language therein are mandated by 49 CFR Part 19, Appendix A.

Modifications have been made to the Clause pursuant to Section 10 of the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, *et seq.*]

- Lobbying Certification and Disclosure of Lobbying Activities for third party contractors are mandated by 31 U.S.C. 1352(b)(5), as amended by Section 10 of the Lobbying Disclosure Act of 1995, and DOT implementing regulation, "New Restrictions on Lobbying," at 49 CFR § 20.110(d)

- Language in Lobbying Certification is mandated by 49 CFR Part 19, Appendix A, Section 7, which provides that contractors file the certification required by 49 CFR Part 20, Appendix A.

Modifications have been made to the Lobbying Certification pursuant to Section 10 of the Lobbying Disclosure Act of 1995.

- Use of "Disclosure of Lobbying Activities," Standard Form-LLL set forth in Appendix B of 49 CFR Part 20, as amended by "Government wide Guidance For New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96) is mandated by 49 CFR Part 20, Appendix A.

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of $100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

APPENDIX A, 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding $100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement,

and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure.]

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

_____Signature of Contractor's Authorized Official

_____Name and Title of Contractor's Authorized Official

_____Date

11. ACCESS TO RECORDS AND REPORTS

49 U.S.C. 5325
18 CFR 18.36 (i)
49 CFR 633.17

Applicability to Contracts
Reference Chart "Requirements for Access to Records and Reports by Type of Contracts"

Flow Down
FTA does not require the inclusion of these requirements in subcontracts.

Access to Records - The following access to records requirements apply to this Contract:

1. Where the Purchaser is not a State but a local government and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 18.36(i), the Contractor agrees to provide the Purchaser, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

2. Where the Purchaser is a State and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 633.17, Contractor agrees to provide the Purchaser, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at $100,000.

3. Where the Purchaser enters into a negotiated contract for other than a small purchase or under the simplified acquisition threshold and is an institution of higher education, a hospital or other non-profit organization and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 19.48, Contractor agrees to provide the Purchaser, FTA Administrator, the Comptroller General of the United States or any of their duly authorized representatives with access to any books, documents, papers and record of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions.

4. Where any Purchaser which is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 U.S.C. 5325(a) enters into a contract for a capital project or improvement (defined at 49 U.S.C. 5302(a)1) through other than competitive bidding, the Contractor shall make available records related to the contract to the Purchaser, the Secretary of Transportation

and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

5. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

6. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the Purchaser, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

7. FTA does not require the inclusion of these requirements in subcontracts.

Requirements for Access to Records and Reports by Types of Contract

Contract Characteristics	Operational Service Contract	Turnkey	Construction	Architectural Engineering	Acquisition of Rolling Stock	Professional Services
I State Grantees	None	Those imposed on state pass thru to Contractor	None	None	None	None
a. Contracts below SAT ($100,000)	None unless[1] non-competitive award		Yes, if non-competitive award or if funded thru[2] 5307/5309/5311	None unless non-competitive award	None unless non-competitive award	None unless non-competitive award
b. Contracts above $100,000/Capital Projects						
II Non State Grantees	Yes[3]	Those imposed on non-state Grantee pass thru to Contractor	Yes	Yes	Yes	Yes
a. Contracts below SAT ($100,000)	Yes[3]		Yes	Yes	Yes	Yes
b. Contracts above $100,000/Capital Projects						

Sources of Authority:
[1] 49 USC 5325 (a)
[2] 49 CFR 633.17
[3] 18 CFR 18.36 (i)

12. FEDERAL CHANGES
49 CFR Part 18

Applicability to Contracts
The Federal Changes requirement applies to all contracts.

Flow Down
The Federal Changes requirement flows down appropriately to each applicable changed requirement.

Federal Changes - Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

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13. BONDING REQUIREMENTS

Applicability to Contracts
For those construction or facility improvement contracts or subcontracts exceeding $100,000, FTA may accept the bonding policy and requirements of the recipient, provided that they meet the minimum requirements for construction contracts as follows:

a. A bid guarantee from each bidder equivalent to five (5) percent of the bid price. The "bid guarantees" shall consist of a firm commitment such as a bid bond, certifies check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

b. A performance bond on the part to the Contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

c. A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in the execution of the work provided for in the contract. Payment bond amounts required from Contractors are as follows:

(1) 50% of the contract price if the contract price is not more than $1 million;

(2) 40% of the contract price if the contract price is more than $1 million but not more than $5 million; or

(3) $2.5 million if the contract price is more than $5 million.

d. A cash deposit, certified check or other negotiable instrument may be accepted by a grantee in lieu of performance and payment bonds, provided the grantee has established a procedure to assure that the interest of FTA is adequately protected. An irrevocable letter of credit would also satisfy the requirement for a bond.

Flow Down

Bonding requirements flow down to the first tier contractors.

Bid Bond Requirements (Construction)

(a) Bid Security

A Bid Bond must be issued by a fully qualified surety company acceptable to (Recipient) and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described thereunder.

(b) Rights Reserved

In submitting this Bid, it is understood and agreed by bidder that the right is reserved by (Recipient) to reject any and all bids, or part of any bid, and it is agreed that the Bid may not be withdrawn for a period of sixty (60) days subsequent to the opening of bids, without the written consent of (Recipient).

It is also understood and agreed that if the undersigned bidder should withdraw any part or all of his bid within sixty (60) days after the bid opening without the written consent of (Recipient), shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance Bonds and Labor and Material Payments Bonds, as provided above, or refuse or be unable to furnish adequate and acceptable insurance, as provided above, he shall forfeit his bid security to the extent of (Recipient's) damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefor.

It is further understood and agreed that to the extent the defaulting bidder's Bid Bond, Certified Check, Cashier's Check, Treasurer's Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by (Recipient) as provided in "Bid Security" of the Instructions to Bidders shall prove inadequate to fully recompense (Recipient) for the damages occasioned by default, then the undersigned bidder agrees to indemnify (Recipient) and pay over to (Recipient) the difference between the bid security and (Recipient's) total damages, so as to make (Recipient) whole.

The undersigned understands that any material alteration of any of the above or any of the material contained on this form, other than that requested, will render the bid unresponsive.

Performance and Payment Bonding Requirements (Construction)

The Contractor shall be required to obtain performance and payment bonds as follows:

(a) Performance bonds

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the (Recipient) determines that a lesser amount would be adequate for the protection of the (Recipient).

2. The (Recipient) may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The (Recipient) may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(b) Payment bonds

1. The penal amount of the payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than $1 million.

(ii) Forty percent of the contract price if the contract price is more than $1 million but not more than $5 million; or

(iii)Two and one half million if the contract price is more than $5 million.

2. If the original contract price is $5 million or less, the (Recipient) may require additional protection as required by subparagraph 1 if the contract price is increased.

Performance and Payment Bonding Requirements (Non-Construction)

The Contractor may be required to obtain performance and payment bonds when necessary to protect the (Recipient's) interest.

1. The following situations may warrant a performance bond:

1. (Recipient) property or funds are to be provided to the contractor for use in performing the contract or as partial compensation (as in retention of salvaged material).

2. A contractor sells assets to or merges with another concern, and the (Recipient), after recognizing the latter concern as the successor in interest, desires assurance that it is financially capable.

3. Substantial progress payments are made before delivery of end items starts.

4. Contracts are for dismantling, demolition, or removal of improvements.

2. When it is determined that a performance bond is required, the Contractor shall be required to obtain performance bonds as follows:

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the (Recipient) determines that a lesser amount would be adequate for the protection of the (Recipient).

2. The (Recipient) may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The (Recipient) may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

3. A payment bond is required only when a performance bond is required, and if the use of payment bond is in the (Recipient's) interest.

4. When it is determined that a payment bond is required, the Contractor shall be required to obtain payment bonds as follows:

1. The penal amount of payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than $1 million;

(ii) Forty percent of the contract price if the contract price is more than $1 million but not more than $5 million; or

(iii)Two and one half million if the contract price is increased.

Advance Payment Bonding Requirements

The Contractor may be required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. The (recipient) shall determine the amount of the advance payment bond necessary to protect the (Recipient).

Patent Infringement Bonding Requirements (Patent Indemnity)

The Contractor may be required to obtain a patent indemnity bond if a performance bond is not furnished and the financial responsibility of the Contractor is unknown or doubtful. The (recipient) shall determine the amount of the patent indemnity to protect the (Recipient).

Warranty of the Work and Maintenance Bonds

1. The Contractor warrants to (Recipient), the Architect and/or Engineer that all materials and equipment furnished under this Contract will be of highest quality and new unless otherwise specified by (Recipient), free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards shall be considered defective. If

required by the [Project Manager], the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by (Recipient) and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to (Recipient). As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment as provided below, furnish separate Maintenance (or Guarantee) Bonds in form acceptable to (Recipient) written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this Contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT (100%) of the CONTRACT SUM, as adjusted (if at all).

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14. CLEAN AIR
42 U.S.C. 7401 et seq
40 CFR 15.61
49 CFR Part 18

Applicability to Contracts
The Clean Air requirements apply to all contracts exceeding $100,000, including indefinite quantities where the amount is expected to exceed $100,000 in any year.

Flow Down
The Clean Air requirements flow down to all subcontracts which exceed $100,000.

Clean Air - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

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15. RECYCLED PRODUCTS
42 U.S.C. 6962
40 CFR Part 247
Executive Order 12873

Applicability to Contracts
The Recycled Products requirements apply to all contracts for items designated by the EPA, when the purchaser or contractor procures $10,000 or more of one of these items during the fiscal year, or has procured $10,000 or more of such items in the previous fiscal year, using Federal funds. New requirements for "recovered materials" will become effective May 1, 1996. These new regulations apply to all procurement actions involving items designated by the EPA, where the procuring agency purchases $10,000 or more of one of these items in a fiscal year, or when the cost of such items purchased during the previous fiscal year was $10,000.

Flow Down
These requirements flow down to all contractor and subcontractor tiers.

Recovered Materials - The contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

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16. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS

Background and Application
The Davis-Bacon and Copeland Acts are codified at 40 USC 3141, *et seq.* and 18 USC 874. The Acts apply to grantee construction contracts and subcontracts that "at least partly are financed by a loan or grant from the Federal Government." 40 USC 3145(a), 29 CFR 5.2(h), 49 CFR 18.36(i)(5). The Acts apply to any construction contract over $2,000. 40 USC 3142(a), 29 CFR 5.5(a). 'Construction,' for purposes of the Acts, includes "actual construction, alteration and/or repair, including painting and decorating." 29 CFR 5.5(a). The requirements of both Acts are incorporated into a single clause (*see* 29 CFR 3.11) enumerated at 29 CFR 5.5(a) and reproduced below.

The clause language is drawn directly from 29 CFR 5.5(a) and any deviation from the model clause below should be coordinated with counsel to ensure the Acts' requirements are satisfied.

Clause Language
Davis-Bacon and Copeland Anti-Kickback Acts

(1) **Minimum wages -** (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the

construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the

action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(v)(A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or (C) of this section, shall be paid to all workers performing work in the
classification under this contract from the first day on which work is performed in the classification.

(2) **Withholding -** The District shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the District may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) **Payrolls and basic records -** (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or

development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the District for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) **Apprentices and trainees -** (i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to

utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) **Compliance with Copeland Act requirements -** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) **Subcontracts -** The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) **Contract termination: debarment -** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) **Compliance with Davis-Bacon and Related Act requirements -** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) **Disputes concerning labor standards -** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) **Certification of eligibility -** (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

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17. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Background and Application

The Contract Work Hours and Safety Standards Act is codified at 40 USC 3701, *et seq.* The Act applies to grantee contracts and subcontracts "financed at least in part by loans or grants from … the [Federal] Government." 40 USC 3701(b)(1)(B)(iii) and (b)(2), 29 CFR 5.2(h), 49 CFR 18.36(i)(6). Although the original Act required its application in any construction contract over $2,000 or non-construction contract to which the Act applied over $2,500 (and language to that effect is still found in 49 CFR 18.36(i)(6)), the Act no longer applies to any "contract in an amount that is not greater than $100,000." 40 USC 3701(b)(3) (A)(iii).

The Act applies to construction contracts and, in very limited circumstances, non-construction projects that employ "laborers or mechanics on a public work." These non-construction applications do not generally apply to transit procurements because transit procurements (to include rail cars and buses) are deemed "commercial items." 40 USC 3707, 41 USC 403 (12). A grantee that contemplates entering into a contract to procure a developmental or unique item should consult counsel to determine if the Act applies to that procurement and that additional language required by 29 CFR 5.5(c) must be added to the basic clause below.

The clause language is drawn directly from 29 CFR 5.5(b) and any deviation from the model clause below should be coordinated with counsel to ensure the Act's requirements are satisfied.

Clause Language
Contract Work Hours and Safety Standards

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages -** In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages -** The District shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts -** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

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18. [RESERVED]

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19. NO GOVERNMENT OBLIGATION TO THIRD PARTIES

Applicability to Contracts
Applicable to all contracts.

Flow Down
Not required by statute or regulation for either primary contractors or subcontractors, this concept should flow down to all levels to clarify, to all parties to the contract, that the Federal Government does not have contractual liability to third parties, absent specific written consent.

No Obligation by the Federal Government.

(1) The Purchaser and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

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20. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS
31 U.S.C. 3801 et seq.
49 CFR Part 31 18 U.S.C. 1001
49 U.S.C. 5307

Applicability to Contracts
These requirements are applicable to all contracts.

Flow Down
These requirements flow down to contractors and subcontractors who make, present, or submit covered claims and statements.

Program Fraud and False or Fraudulent Statements or Related Acts.

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition

to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

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21. TERMINATION
49 U.S.C. Part 18
FTA Circular 4220.1F

Applicability to Contracts
All contracts (with the exception of contracts with nonprofit organizations and institutions of higher education,) in excess of $10,000 shall contain suitable provisions for termination by the grantee including the manner by which it will be effected and the basis for settlement. (For contracts with nonprofit organizations and institutions of higher education the threshold is $100,000.) In addition, such contracts shall describe conditions under which the contract may be terminated for default as well as conditions where the contract may be terminated because of circumstances beyond the control of the contractor.

Flow Down
The termination requirements flow down to all contracts in excess of $10,000, with the exception of contracts with nonprofit organizations and institutions of higher learning.

a. Termination for Convenience (General Provision) The (Recipient) may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to (Recipient) to be paid the Contractor. If the Contractor has any property in its possession belonging to the (Recipient), the Contractor will account for the same, and dispose of it in the manner the (Recipient) directs.

b. Termination for Default [Breach or Cause] (General Provision) If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for

services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the (Recipient) may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by the (Recipient) that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the (Recipient), after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

c. Opportunity to Cure (General Provision) The (Recipient) in its sole discretion may, in the case of a termination for breach or default, allow the Contractor five (5) days in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If Contractor fails to remedy to (Recipient)'s satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within ten (10) after receipt by Contractor of written notice from (Recipient) setting forth the nature of said breach or default, (Recipient) shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude (Recipient) from also pursuing all available remedies against Contractor and its sureties for said breach or default.

d. Waiver of Remedies for any Breach In the event that (Recipient) elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by (Recipient) shall not limit (Recipient)'s remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

e. Termination for Convenience (Professional or Transit Service Contracts) The (Recipient), by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Recipient shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

f. Termination for Default (Supplies and Service) If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

g. Termination for Default (Transportation Services) If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Contractor has possession of Recipient goods, the Contractor shall, upon direction of the (Recipient), protect and preserve the goods until surrendered to the Recipient or its agent. The Contractor and (Recipient) shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the (Recipient).

h. Termination for Default (Construction) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, the (Recipient) may terminate this contract for default. The (Recipient) shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the Recipient may take over the work and compete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Recipient resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Recipient in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if-

1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the Recipient, acts of another Contractor in the performance of a contract with the Recipient, epidemics, quarantine restrictions, strikes, freight embargoes; and

2. the contractor, within 10 days from the beginning of any delay, notifies the (Recipient) in writing of the causes of delay. If in the judgment of the (Recipient), the delay is excusable, the

time for completing the work shall be extended. The judgment of the (Recipient) shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Recipient.

i. Termination for Convenience or Default (Architect and Engineering) The (Recipient) may terminate this contract in whole or in part, for the Recipient's convenience or because of the failure of the Contractor to fulfill the contract obligations. The (Recipient) shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

If the termination is for the convenience of the Recipient, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

If the termination is for failure of the Contractor to fulfill the contract obligations, the Recipient may complete the work by contact or otherwise and the Contractor shall be liable for any additional cost incurred by the Recipient.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

j. Termination for Convenience of Default (Cost-Type Contracts) The (Recipient) may terminate this contract, or any portion of it, by serving a notice or termination on the Contractor. The notice shall state whether the termination is for convenience of the (Recipient) or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from the (Recipient), or property supplied to the Contractor by the (Recipient). If the termination is for default, the (Recipient) may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the (Recipient) and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of the (Recipient), the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, the (Recipient) determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, the (Recipient), after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

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22. GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NONPROCUREMENT)

Background and Applicability

In conjunction with the Office of Management and Budget and other affected Federal agencies, DOT published an update to 49 CFR Part 29 on November 26, 2003. This government-wide regulation implements Executive Order 12549, *Debarment and Suspension*, Executive Order 12689, *Debarment and Suspension*, and 31 U.S.C. 6101 note (Section 2455, Public Law 103-355, 108 Stat. 3327).

The provisions of Part 29 apply to all grantee contracts and subcontracts at any level expected to equal or exceed $25,000 as well as any contract or subcontract (at any level) for Federally required auditing services. 49 CFR 29.220(b). This represents a change from prior practice in that the dollar threshold for application of these rules has been lowered from $100,000 to $25,000. These are contracts and subcontracts referred to in the regulation as "covered transactions."

Grantees, contractors, and subcontractors (at any level) that enter into covered transactions are required to verify that the entity (as well as its principals and affiliates) they propose to contract or subcontract with is not excluded or disqualified. They do this by (a) Checking the Excluded Parties List System, (b) Collecting a certification from that person, or (c) Adding a clause or condition to the contract or subcontract. This represents a change from prior practice in that certification is still acceptable but is no longer required. 49 CFR 29.300.

Grantees, contractors, and subcontractors who enter into covered transactions also must require the entities they contract with to comply with 49 CFR 29, subpart C and include this requirement in their own subsequent covered transactions (i.e., the requirement flows down to subcontracts at all levels).

Suspension and Debarment

> This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.
>
> The contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it

enters into. By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the District. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the District, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

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23. PRIVACY ACT
5 U.S.C. 552

Applicability to Contracts
When a grantee maintains files on drug and alcohol enforcement activities for FTA, and those files are organized so that information could be retrieved by personal identifier, the Privacy Act requirements apply to all contracts.

Flow Down
The Federal Privacy Act requirements flow down to each third party contractor and their contracts at every tier.

Contracts Involving Federal Privacy Act Requirements - The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974,

5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

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24. CIVIL RIGHTS REQUIREMENTS

29 U.S.C. § 623, 42 U.S.C. § 2000
42 U.S.C. § 6102, 42 U.S.C. § 12112
42 U.S.C. § 12132, 49 U.S.C. § 5332
29 CFR Part 1630, 41 CFR Parts 60 et seq.

Applicability to Contracts
The Civil Rights Requirements apply to all contracts.

Flow Down
The Civil Rights requirements flow down to all third party contractors and their contracts at every tier.

Civil Rights - The following requirements apply to the underlying contract:

(1) Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:

(a) Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(b) Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to

refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(c) Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

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25. BREACHES AND DISPUTE RESOLUTION
49 CFR Part 18
FTA Circular 4220.1F

Applicability to Contracts
All contracts in excess of $100,000 shall contain provisions or conditions which will allow for administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. This may include provisions for bonding, penalties for late or inadequate performance, retained earnings, liquidated damages or other appropriate measures.

Flow Down
The Breaches and Dispute Resolutions requirements flow down to all tiers.

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of District. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the District. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the District shall be binding upon the Contractor and the Contractor shall abide be the decision.

Performance During Dispute - Unless otherwise directed by District, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefor shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the District and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the District is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the District, Architect or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

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26. PATENT AND RIGHTS IN DATA
37 CFR Part 401
49 CFR Parts 18 and 19

Applicability to Contracts
Patent and rights in data requirements for federally assisted projects ONLY apply to research projects in which FTA finances the purpose of the grant is to finance the development of a product or information. These patent and data rights requirements do not apply to capital projects or operating projects, even though a small portion of the sales price may cover the cost of product development or writing the user's manual.

Flow Down
The Patent and Rights in Data requirements apply to all contractors and their contracts at every tier.

CONTRACTS INVOLVING EXPERIMENTAL, DEVELOPMENTAL, OR RESEARCH WORK.

A. **Rights in Data** - This following requirements apply to each contract involving experimental, developmental or research work:

(1) The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards, magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term "subject data" does not include financial reports, cost analyses, and similar information incidental to contract administration.

(2) The following restrictions apply to all subject data first produced in the performance of the contract to which this Attachment has been added:

(a) Except for its own internal use, the Purchaser or Contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Purchaser or Contractor authorize others to do so, without the written consent of the Federal Government, until such time as the Federal Government may have either released or approved the release of such data to the public; this restriction on publication, however, does not apply to any contract with an academic institution.

(b) In accordance with 49 C.F.R. § 18.34 and 49 C.F.R. § 19.36, the Federal Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for "Federal Government purposes," any subject data or copyright described in subsections (2)(b)1 and (2)(b)2 of this clause below. As used in the previous sentence, "for Federal Government purposes," means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its Federal license to any other party.

1. Any subject data developed under that contract, whether or not a copyright has been obtained; and

2. Any rights of copyright purchased by the Purchaser or Contractor using Federal assistance in whole or in part provided by FTA.

(c) When FTA awards Federal assistance for experimental, developmental, or research work, it is FTA's general intention to increase transportation knowledge available to the public, rather than to restrict the benefits resulting from the work to participants in that work. Therefore, unless FTA determines otherwise, the Purchaser and the Contractor performing experimental, developmental, or research work required by the underlying contract to which this Attachment is added agrees to permit FTA to make available to the public, either FTA's license in the copyright to any subject data developed in the course of that contract, or a copy of the subject data first produced under the contract for which a copyright has not been obtained. If the experimental, developmental, or research work, which is the subject of the underlying contract, is not completed for any reason whatsoever, all data developed under that contract shall become subject data as defined in subsection (a) of this clause and shall be delivered as the Federal Government may direct. This subsection (c), however, does not apply to adaptations of automatic data processing equipment or programs for the Purchaser or Contractor's use whose costs are financed in whole or in part with Federal assistance provided by FTA for transportation capital projects.

(d) Unless prohibited by state law, upon request by the Federal Government, the Purchaser and the Contractor agree to indemnify, save, and hold harmless the Federal Government, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the Purchaser or Contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under that contract.

Neither the Purchaser nor the Contractor shall be required to indemnify the Federal Government for any such liability arising out of the wrongful act of any employee, official, or agents of the Federal Government.

(e) Nothing contained in this clause on rights in data shall imply a license to the Federal Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Federal Government under any patent.

(f) Data developed by the Purchaser or Contractor and financed entirely without using Federal assistance provided by the Federal Government that has been incorporated into work required by the underlying contract to which this Attachment has been added is exempt from the requirements of subsections (b), (c), and (d) of this clause, provided that the Purchaser or Contractor identifies that data in writing at the time of delivery of the contract work.

(g) Unless FTA determines otherwise, the Contractor agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

(3) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (i.e., a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual, etc.), the Purchaser and the Contractor agree to take the necessary actions to provide, through FTA, those rights in that invention due the Federal Government as described in

U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.

(4) The Contractor also agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

B. **Patent Rights -** The following requirements apply to each contract involving experimental, developmental, or research work:

(1) General - If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the contract to which this Attachment has been added, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the Purchaser and Contractor agree to take actions necessary to provide immediate notice and a detailed report to the party at a higher tier until FTA is ultimately notified.

(2) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), the Purchaser and the Contractor agree to take the necessary actions to provide,

through FTA, those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.

(3) The Contractor also agrees to include the requirements of this clause in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

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27. TRANSIT EMPLOYEE PROTECTIVE AGREEMENTS
49 U.S.C. § 5310, § 5311, and § 5333
29 CFR Part 215

Applicability to Contracts
The Transit Employee Protective Provisions apply to each contract for transit operations performed by employees of a Contractor recognized by FTA to be a transit operator. (Because transit operations involve many activities apart from directly driving or operating transit vehicles, FTA determines which activities constitute transit "operations" for purposes of this clause.)

Flow Down
These provisions are applicable to all contracts and subcontracts at every tier.

Transit Employee Protective Provisions. (1) The Contractor agrees to comply with applicable transit employee protective requirements as follows:

(a) General Transit Employee Protective Requirements - To the extent that FTA determines that transit operations are involved, the Contractor agrees to carry out the transit operations work on the underlying contract in compliance with terms and conditions determined by the U.S. Secretary of Labor to be fair and equitable to protect the interests of employees employed under this contract and to meet the employee protective requirements of 49 U.S.C. A 5333(b), and U.S. DOL guidelines at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in the letter of certification from the U.S. DOL to FTA applicable to the FTA Recipient's project from which Federal assistance is provided to support work on the underlying contract. The Contractor agrees to carry out that work in compliance with the conditions stated in that U.S. DOL letter. The requirements of this subsection (1), however, do not apply to any contract financed with Federal assistance provided by FTA either for projects for elderly individuals and individuals with disabilities authorized by 49 U.S.C. § 5310(a)(2), or for projects for nonurbanized areas authorized by 49 U.S.C. § 5311. Alternate provisions for those projects are set forth in subsections (b) and (c) of this clause.

(b) Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C. § 5310(a)(2) for Elderly Individuals and Individuals with Disabilities - If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. §

5310(a)(2), and if the U.S. Secretary of Transportation has determined or determines in the future that the employee protective requirements of 49 U.S.C. § 5333(b) are necessary or appropriate for the state and the public body subrecipient for which work is performed on the underlying contract, the Contractor agrees to carry out the Project in compliance with the terms and conditions determined by the U.S. Secretary of Labor to meet the requirements of 49 U.S.C. § 5333(b), U.S. DOL guidelines at 29 C.F.R. Part 215, and any amendments thereto. These terms and conditions are identified in the U.S. DOL's letter of certification to FTA, the date of which is set forth Grant Agreement or Cooperative Agreement with the state. The Contractor agrees to perform transit operations in connection with the underlying contract in compliance with the conditions stated in that U.S. DOL letter.

(c) Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C. § 5311 in Nonurbanized Areas - If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. § 5311, the Contractor agrees to comply with the terms and conditions of the Special Warranty for the Nonurbanized Area Program agreed to by the U.S. Secretaries of Transportation and Labor, dated May 31, 1979, and the procedures implemented by U.S. DOL or any revision thereto.

(2) The Contractor also agrees to include the any applicable requirements in each subcontract involving transit operations financed in whole or in part with Federal assistance provided by FTA.

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28. DISADVANTAGED BUSINESS ENTERPRISE (DBE)
49 CFR Part 26

Background and Applicability

The newest version on the Department of Transportation's Disadvantaged Business Enterprise (DBE) program became effective July 16, 2003. The rule provides guidance to grantees on the use of overall and contract goals, requirement to include DBE provisions in subcontracts, evaluating DBE participation where specific contract goals have been set, reporting requirements, and replacement of DBE subcontractors. Additionally, the DBE program dictates payment terms and conditions (including limitations on retainage) applicable to all subcontractors regardless of whether they are DBE firms or not.

The DBE program applies to all DOT-assisted contracting activities. A formal clause such as that below must be included in all contracts above the micro-purchase level. The requirements of clause subsection b flow down to subcontracts.

A substantial change to the payment provisions in this newest version of Part 26 concerns retainage (*see* section 26.29). Grantee choices concerning retainage should be reflected in the language choices in clause subsection d.

Disadvantaged Business Enterprises

a. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The agency's overall goal for DBE participation is 24%. A separate contract goal of 24% DBE participation has been established for this procurement.

b. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the District deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (*see* 49 CFR 26.13(b)).

c. Bidders/offerors are required to document sufficient DBE participation to meet these goals or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26.53. Award of this contract is conditioned on submission of the following prior to award:

1. The names and addresses of DBE firms that will participate in this contract;
2. A description of the work each DBE will perform;
3. The dollar amount of the participation of each DBE firm participating;
4. Written documentation of the bidder/offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal;
5. Written confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment; and
6. If the contract goal is not met, evidence of good faith efforts to do so.

Bidders must present the information required above prior to contract award (*see* 49 CFR 26.53(3)).

d. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from the District. In addition, the contractor may not hold retainage from its subcontractors.

e. The contractor must promptly notify the District, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of District.

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29. [RESERVED]

30. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS
FTA Circular 4220.1F

Applicability to Contracts
The incorporation of FTA terms applies to all contracts.

Flow Down
The incorporation of FTA terms has unlimited flow down.

Incorporation of Federal Transit Administration (FTA) Terms - The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

31. DRUG AND ALCOHOL TESTING
49 U.S.C. §5331
49 CFR Parts 653 and 654

Applicability to Contracts
The Drug and Alcohol testing provisions apply to Operational Service Contracts.

Flow Down Requirements
Anyone who performs a safety-sensitive function for the recipient or subrecipient is required to comply with 49 CFR 653 and 654, with certain exceptions for contracts involving maintenance services. Maintenance contractors for non-urbanized area formula program grantees are not subject to the rules. Also, the rules do not apply to maintenance subcontractors.

Introduction
FTA's drug and alcohol rules, 49 CFR 653 and 654, respectively, are unique among the regulations issued by FTA. First, they require recipients to ensure that any entity performing a safety-sensitive function on the recipient's behalf (usually subrecipients and/or contractors) implement a complex drug and alcohol testing program that complies with Parts 653 and 654. Second, the rules condition the receipt of certain kinds of FTA funding on the recipient's compliance with the rules; thus, the recipient is not in compliance with the rules unless every entity that performs a safety-sensitive function on the recipient's behalf is in compliance with the rules. Third, the rules do not specify how a recipient ensures that its subrecipients and/or contractors comply with them.

How a recipient does so depends on several factors, including whether the contractor is covered independently by the drug and alcohol rules of another Department of Transportation operating administration, the nature of the relationship that the recipient has with the contractor, and the financial resources available to the recipient to oversee the contractor's drug and alcohol testing program. In short, there are a variety of ways a recipient can ensure that its subrecipients and contractors comply with the rules.

Therefore, FTA has developed three model contract provisions for recipients to use "as is" or to modify to fit their particular situations.

Explanation of Model Contract Clauses

Under Option 1, the recipient ensures the contractor's compliance with the rules by requiring the contractor to participate in a drug and alcohol program administered by the recipient. The advantages of doing this are obvious: the recipient maintains total control over its compliance with 49 CFR 653 and 654. The disadvantage is that the recipient, which may not directly employ any safety-sensitive employees, has to implement a complex testing program. Therefore, this may be a practical option only for those recipients which have a testing program for their employees, and can add the contractor's safety-sensitive employees to that program.

Under Option 2, the recipient relies on the contractor to implement a drug and alcohol testing program that complies with 49 CFR 653 and 654, but retains the ability to monitor the contractor's testing program; thus, the recipient has less control over its compliance with the drug and alcohol testing rules than it does under option 1. The advantage of this approach is that it places the responsibility for complying with the rules on the entity that is actually performing the safety-sensitive function. Moreover, it reserves to the recipient the power to ensure that the contractor complies with the program. The disadvantage of Option 2 is that without adequate monitoring of the contractor's program, the recipient may find itself out of compliance with the rules.

Under option 3, the recipient specifies some or all of the specific features of a contractor's drug and alcohol compliance program. Thus, it requires the recipient to decide what it wants to do and how it wants to do it. The advantage of this option is that the recipient has more control over the contractor's drug and alcohol testing program, yet it is not actually administering the testing program. The disadvantage is that the recipient has to specify and understand clearly what it wants to do and why.

Drug and Alcohol Testing

The contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of (name of State), or the District, to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The contractor agrees further to certify annually its

compliance with Parts 653 and 654 before January 15 and to submit the Management Information System (MIS) reports before March 1 to the Project Manager for the District. To certify compliance the contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.

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32. ADA Access
49 U.S.C. § 5301(d)

Access for Individuals with Disabilities. The Recipient (and all subrecipients) agrees to comply with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Recipient also agrees to comply with all applicable provisions of section 504 of the Rehabilitation Act of 1973, as amended, with 29 U.S.C. § 794, which prohibits discrimination on the basis of disability; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 et seq., which requires that accessible facilities and services be made available to individuals with disabilities; and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 *et seq.*, which requires that buildings and public accommodations be accessible to individuals with disabilities. In addition, the Recipient agrees to comply with applicable Federal regulations and directives and any subsequent amendments thereto, except to the extent the Federal Government determines otherwise in writing, as follows:

(1) U.S. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. Part 37;

(2) U.S. DOT regulations, "Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 C.F.R. Part 27;

(3) Joint U.S. Architectural and Transportation Barriers Compliance Board (U.S. ATBCB)/U.S. DOT regulations, "Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 C.F.R. Part 1192 and 49 C.F.R. Part 38;

(4) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 C.F.R. Part 35;

(5) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 C.F.R. Part 36;

(6) U.S. General Services Administration (U.S. GSA) regulations, "Accommodations for the Physically Handicapped," 41 C.F.R. Subpart 101 19;

(7) U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630;

(8) U.S. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled," 47 C.F.R. Part 64, Subpart F; and

(9) U.S. ATBCB regulations, “Electronic and Information Technology Accessibility Standards,” 36 C.F.R. Part 1194;

(10) FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 C.F.R. Part 609; and

(11) Federal civil rights and nondiscrimination directives implementing the foregoing regulations.

A. BUY AMERICA CERTIFICATION

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 C.F.R. Part 661.5.

Date _____

Signature _____

Company Name _____

Title _____

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Date _____

Signature _____

Company Name _____

Title _____

B. CERTIFICATION REGARDING LOBBYING

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure.]

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

_____ Signature of Contractor's Authorized Official
_____ Name and Title of Contractor's Authorized Official
_____ Date

C. CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Primary Participant _____ certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or

local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and

4. Have not within a three-year period preceding this application/proposal had one or more public transaction (Federal, State or local) terminated for cause or default.

(If the Primary Participant is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT, _____ CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

_____

Signature and Title of Authorized Official

The undersigned Chief Legal Counsel for _____ hereby certifies that _____ has authority under State and local law to comply with the subject assurances and that the certification above has been legally made.

_____

Signature of Applicant's Attorney

_____

Date

D. SCHEDULE OF DBE PARTICIPATION

_____

Name of Prime Contractor

Name of DBE Contractor	Address	Type of Work	Start/End Dates	Agreed Price
1.				
2.				
3.				

4._____

5._____

6._____

7._____

8._____

NOTE

The undersigned will enter into a formal agreement with Disadvantaged Contractors for work listed in this schedule conditioned upon the execution of a contract with the owner.

_____
Signature

_____
Name of Prime Contractor

_____
Date

E. LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

To: _____
Name of Contractor

The undersigned intends to perform work in connection with the above project as (check one):

_____ an individual ____ a corporation

_____ a partnership ____ a joint venture

The disadvantaged status of the undersigned is confirmed (a) in the City of Houston or TxDOT DBE Directory.

The undersigned is prepared to perform the following described work in connection with the above project,

_____

_____

_____

_____

at the following price: $_____.

_____ percent of the dollar value of the subcontract will be sublet and/or awarded to non disadvantaged contractors and/or non disadvantaged suppliers. The undersigned will enter into a formal agreement for the above work upon execution of a contract with the Owner.

_____
Disadvantaged Contractor

_____
Signature

_____
Date

EXHIBIT B

General Decision Number: TX130056 01/04/2013 TX56

Superseded General Decision Number: TX20120056

State: Texas

Construction Type: Highway

Counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, San Jacinto and Waller Counties in Texas.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Modification Number	Publication Date
0	01/04/2013

* SUTX2011-013 08/10/2011

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (Paving and Structures)	$ 12.98	
ELECTRICIAN	$ 27.11	
FORM BUILDER/FORM SETTER		
Paving & Curb	$ 12.34	
Structures	$ 12.23	
LABORER		
Asphalt Raker	$ 12.36	
Flagger	$ 10.33	
Laborer, Common	$ 11.02	
Laborer, Utility	$ 11.73	
Pipelayer	$ 12.12	
Work Zone Barricade Servicer	$ 11.67	
PAINTER (Structures)	$ 18.62	
POWER EQUIPMENT OPERATOR:		
Asphalt Distributor	$ 14.06	
Asphalt Paving Machine	$ 14.32	
Broom or Sweeper	$ 12.68	

Concrete Pavement Finishing Machine.....$ 13.07
Concrete Paving, Curing, Float, Texturing Machine....$ 11.71
Concrete Saw.....$ 13.99
Crane, Hydraulic 80 Tons or less.....$ 13.86
Crane, Lattice boom 80 tons or less.....$ 14.97
Crane, Lattice boom over 80 Tons.....$ 15.80
Crawler Tractor.....$ 13.68
Excavator, 50,000 pounds or less.....$ 12.71
Excavator, Over 50,000 pounds.....$ 14.53
Foundation Drill, Crawler Mounted.....$ 17.43
Foundation Drill, Truck Mounted.....$ 15.89
Front End Loader 3 CY or Less.....$ 13.32
Front End Loader, Over 3 CY.$ 13.17
Loader/Backhoe.....$ 14.29
Mechanic.....$ 16.96
Milling Machine.....$ 13.53
Motor Grader, Fine Grade....$ 15.69
Motor Grader, Rough.....$ 14.23
Off Road Hauler.....$ 14.60
Pavement Marking Machine....$ 11.18
Piledriver.....$ 14.95
Roller, Asphalt.....$ 11.95
Roller, Other.....$ 11.57
Scraper.....$ 13.47
Spreader Box.....$ 13.58

Servicer.....$ 13.97

Steel Worker
Reinforcing Steel.....$ 15.15
Structural Steel Welder.....$ 12.85
Structural Steel.....$ 14.39

TRUCK DRIVER
Low Boy Float.....$ 16.03
Single Axle.....$ 11.46
Single or Tandem Axle Dump..$ 11.48
Tandem Axle Tractor w/Semi Trailer.....$ 12.27

WELDERS - Receive rate prescribed for craft performing

operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may

include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

IX. RELEASES AND CERTIFICATIONS OF COMPLETION

FINAL AFFIDAVIT
AND RELEASE FOR CONTRACTOR

THE STATE OF TEXAS §
COUNTY OF _____ §

[Contractor], located at _____ (hereinafter "Contractor"), in accordance with the terms and conditions of the Contract dated , 20____ between Contractor and Greater East End Management District (the "Owner") for the construction of [describe improvements] (as more fully described therein) and any amendments thereto (the "Contract"; capitalized words used herein shall have the meaning set forth in the Contract), hereby acknowledges the receipt and sufficiency of the sum of $, ([Spell out payment amount]), and other good and valuable consideration, as full and final payment for furnishing the Work as defined in the Contract, including all labor, materials and services, for improvements known as [insert description of project] to the following described property:

[Insert Legal Description of Property]

Contractor hereby acknowledges and certifies that the said improvements have been erected and completed in full compliance with the above referenced Contract, including without limitation in full compliance with the plans and specifications therefor.

In consideration for such full and final payment, Contractor, on behalf of itself and its predecessors, employees, agents, officers, directors, shareholders, representatives, attorneys, affiliates, successors, insurers and assigns, and on behalf of any other persons claiming by, through or under Contractor, does hereby waive, release, and relinquish its rights to and discharge, release and acquit the project site and Owner and its agents, representatives, attorneys, heirs, affiliates, successors, insurers and assigns, from any and all causes of action, claims, demands, debts, liabilities, expenses or costs of any kind and every character and nature whatsoever, including but not limited to any lien claims or rights, whether known or unknown, contingent or fixed, either in or arising out of the law of contracts, torts or property rights, whether arising under statutory law or common law, at law or in equity, with respect to the above-referenced property and arising out of the Work for which such full and final payment is made. Furthermore, Contractor agrees to indemnify and hold harmless Owner and all other persons or entities released by Contractor above against the full amount of any liability, loss, claim, damage, or expense(including attorneys' fees and any judgment required to be paid) in connection with any of the matters it has released in the event any person should assert against any such released person or entity a claim under assignment or title derivative from Contractor and in connection with any claims made in connection with or relating to Contractor's provision of the Work on the above-referenced property. Contractor represents and warrants that all bills and claims against Contractor of every nature and kind whatsoever arising out of labor performed or material or equipment supplied or because of the performance of the Work by Contractor have been or will be paid and satisfied, and that this Final Affidavit and Release is made for the purpose of inducing final payment under the Contract.

EXECUTED this _____ day of _____ 20___.

CONTRACTOR: _____
By: _____
Name: _____
Print or Type: _____
Title: _____

SWORN TO AND SUBSCRIBED BEFORE ME, under my official hand and seal of office on this day of _____ , 20__.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

AFFIDAVIT

THE STATE OF TEXAS §
COUNTY OF _____ §

BEFORE ME, the undersigned Notary Public, on this day personally came and appeared _____ known to me to be the individual whose name is subscribed to the foregoing FINAL AFFIDAVIT AND RELEASE and being duly sworn, did state and acknowledge on his oath that he/she is the _____ of [Contractor] and is authorized to execute and deliver the foregoing on behalf of [Contractor] as an act and deed of that entity for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____ 20___.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

FINAL AFFIDAVIT AND RELEASE
FOR SUBCONTRACTOR

THE STATE OF TEXAS §
COUNTY OF _____ §

[Subcontractor], located at _____ (hereinafter "Subcontractor"), in accordance with the terms and conditions of that certain Subcontract dated , 20____ between Subcontractor and [Insert name of Contractor] (hereinafter "Contractor") and any amendments thereto, hereby acknowledges the receipt and sufficiency of the sum of $, ([Spell out payment amount]), and other good and valuable consideration, as full and final payment for furnishing [insert description of the Subcontractor's Work], including all labor, materials and services, for improvements known as [insert description of project] to the following described property:

[Insert Legal Description of Property]

Subcontractor hereby acknowledges and certifies that Contractor and the _____ Redevelopment Authority ("Owner") paid Subcontractor all sums owing and that it has no further claims against Contractor, Owner or the above referenced property.

In consideration for such full and final payment, Subcontractor, on behalf of itself and its predecessors, employees, agents, officers, directors, shareholders, representatives, attorneys, successors, insurers and assigns, and on behalf of any other persons claiming by, through or under Subcontractor, does hereby waive, release, and relinquish its rights to and discharge, release and acquit Contractor, the project site, and Owner and its agents, representatives, attorneys, heirs, affiliates, successors, insurers and assigns, from any and all causes of action, claims, demands, debts, liabilities, expenses or costs of any kind and every character and nature whatsoever, including but not limited to any lien claims or rights, whether known or unknown, contingent or fixed, either in or arising out of the law of contracts, torts or property rights, whether arising under statutory law or common law, at law or in equity, with respect to the above-referenced property. Furthermore, Subcontractor agrees to indemnify and hold harmless Owner and all other persons or entities released by Subcontractor above against the full amount of any liability, loss, claim, damage, or expense (including attorneys' fees and any judgment required to be paid) in connection with any of the matters it has released in the event any person should assert against such released person or entity a claim under assignment or title derivative from Subcontractor and in connection with any claims made in connection with or relating to Subcontractor's provision of labor, materials and/or service on the above-referenced property. Subcontractor represents and warrants that all bills and claims against Subcontractor of every nature and kind whatsoever arising out of labor performed or material or equipment supplied or because of the performance of the Subcontractor have been or will be paid and satisfied, and that this Final Affidavit and Release is made for the purpose of inducing payment under the Subcontract.

EXECUTED this ____day of _____ 20___.

SUBCONTRACTOR: _____
By: _____
Name: _____
Print or Type: _____
Title: _____

SWORN TO AND SUBSCRIBED BEFORE ME, under my official hand and seal of office on this ____ day of _____, 20___.

_____
Notary Public in and for
the State of

(SEAL)

My Commission Expires: _____

AFFIDAVIT

THE STATE OF TEXAS §
COUNTY OF _____ §

BEFORE ME, the undersigned Notary Public, on this day personally came and appeared known to me to be the individual whose name is subscribed to the foregoing FINAL AFFIDAVIT AND RELEASE and being duly sworn, did state and acknowledge on his oath that he/she is the of [Subcontractor] and is authorized to execute and deliver the foregoing on behalf of [Subcontractor] as an act and deed of that entity for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ___ day of _____ , 20___.

Notary Public in and for _____
the State of _____

(SEAL)

My Commission Expires: _____

PARTIAL AFFIDAVIT AND RELEASE
FOR CONTRACTOR

THE STATE OF TEXAS §
COUNTY OF _____ §

[Contractor], located at _____ (hereinafter "Contractor"), in accordance with the terms and conditions of the Contract dated _____ , 20____ for described improvements (as more fully described therein) between Contractor and Greater East End Management District ("Owner") and any amendments thereto (the "Contract" and capitalized words used herein shall have the meaning set forth in the Contract), hereby acknowledges the receipt and sufficiency of the sum of $ _____ , ([Spell out payment amount]), and other good and valuable consideration, in partial payment for furnishing the Work as defined in the Agreement, including all labor, materials and services, for improvements known as [insert description of project] to the following described property:

[Insert Legal Description of Property]

Contractor hereby acknowledges and certifies that Owner has made partial payment to Contractor on all sums owing and that it has no further claims against Owner or the above referenced property to the extent of such partial payment and upon the further payment of $_____, ([Spell out payment amount]) will have no further claims against Owner or the above referenced property to the extent of such further payment.

In consideration for such partial and further payment, Contractor, on behalf of itself and its predecessors, employees, agents, officers, directors, shareholders, representatives, attorneys, affiliates, successors, insurers and assigns, and on behalf of any other persons claiming by, through or under Contractor, does hereby waive, release, and relinquish its rights to and discharge, release and acquit the project site and Owner and its agents, representatives, attorneys, heirs, affiliates, successors, insurers and assigns, from any and all causes of action, claims, demands, debts, liabilities, expenses or costs of any kind and every character and nature whatsoever, including but not limited to any lien claims or rights, whether known or unknown, contingent or fixed, either in or arising out of the law of contracts, torts or property rights, whether arising under statutory law or common law, at law or in equity, with respect to the above-referenced property and arising out of the Work for which such partial and further payment was and is made. Furthermore, Contractor agrees to indemnify and hold harmless Owner and all other persons or entities released by Contractor above against the full amount of any liability, loss, claim, damage, or expense (including attorneys' fees and any judgment required to be paid) in connection with any of the matters it has released in the event any person should assert against such released person or entity a claim under assignment or title derivative from Contractor and in connection with any claims made in connection with or relating to Contractor's provision of the Work on the above-referenced property. Contractor represents and warrants that all bills and claims against Contractor of every nature and kind whatsoever arising out of labor performed or material or equipment supplied or because of the performance of the Work by Contractor have been or will be paid and satisfied, and that this Partial Affidavit and Release is made for the purpose of inducing payment under the Contract.

EXECUTED this _____ day of _____ 20___.

CONTRACTOR: _____
By: _____
Name: _____
Print or Type: _____
Title: _____

SWORN TO AND SUBSCRIBED BEFORE ME, under my official hand and seal of office on this ___ day _____ of _____, 20___.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

AFFIDAVIT

THE STATE OF TEXAS §
COUNTY OF _____ §

BEFORE ME, the undersigned Notary Public, on this day personally came and appeared _____ known to me to be the individual whose name is subscribed to the foregoing PARTIAL AFFIDAVIT AND RELEASE and being duly sworn, did state and acknowledge on his oath that he/she is the _____ of [Contractor] and is authorized to execute and deliver the foregoing on behalf of [Contractor] as an act and deed of that entity for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ___ day of _____ , 20___.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

FORM OF PARTIAL AFFIDAVIT AND RELEASE FOR SUBCONTRACTOR

THE STATE OF TEXAS §
COUNTY OF _____ §

[Subcontractor], located at _____ (hereinafter "Subcontractor"), in accordance with the terms and conditions of Subcontract dated _____-- , 20____ between Subcontractor and [insert Contractor name] (hereinafter "Contractor") and any amendments thereto, hereby acknowledges the receipt and sufficiency of the sum of $ _____, ([Spell out payment amount]), and other good and valuable consideration, in partial payment for furnishing [insert description of the Subcontractor's Work] , including all labor, materials and services, for improvements known as [insert description of project] to the following described property:

[Insert Legal Description of Property]

Subcontractor hereby acknowledges and certifies that Contractor and Greater East End Management District (the "Owner") have made partial payment to Subcontractor on all sums owing and that it has no further claims against Contractor or Owner or the above referenced property to the extent of such partial payment and upon the further payment of $ _____ , ([Spell out payment amount]) will have no further claims against Contractor or Owner to the extent of such further payment.

In consideration for such partial and further payment, Subcontractor, on behalf of itself and its predecessors, employees, agents, officers, directors, shareholders, representatives, attorneys, successors, insurers and assigns, and on behalf of any other persons claiming by, through or under Subcontractor, does hereby waive, release, and relinquish its rights to and discharge, release and acquit Contractor, the project site, and Owner and its agents, representatives, attorneys, heirs, affiliates, successors, insurers and assigns, from any and all causes of action, claims, demands, debts, liabilities, expenses or costs of any kind and every character and nature whatsoever, including but not limited to any lien claims or rights, whether known or unknown, contingent or fixed, either in or arising out of the law of contracts, torts or property rights, whether arising under statutory law or common law, at law or in equity, with respect to the above-referenced property and arising out of the work for which such partial and further payment was and is made. Furthermore, Subcontractor agrees to indemnify and hold harmless Owner and all other persons or entities released by Subcontractor above against the full amount of any liability, loss, claim, damage, or expense (including attorneys' fees and any judgment required to be paid) in connection with any of the matters it has released in the event any person should assert against such released person or entity a claim under assignment or title derivative from Subcontractor and in connection with any claims made in connection with or relating to Subcontractor's provision of labor, materials and/or service on the above-referenced property. Subcontractor represents and warrants that all bills and claims against Subcontractor of every nature and kind whatsoever arising out of labor performed or material or equipment supplied or because of the performance of the Subcontractor have been or will be paid and satisfied, and that this Partial Affidavit and Release is made for the purpose of inducing payment under the Subcontract.

EXECUTED this ____ day of _____ 20___.

SUBCONTRACTOR: _____
By: _____
Name: _____
Print or Type: _____
Title: _____

SWORN TO AND SUBSCRIBED BEFORE ME, under my official hand and seal of office on this ____ day of _____ , 20___.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

AFFIDAVIT

THE STATE OF TEXAS §
COUNTY OF _____ §

BEFORE ME, the undersigned Notary Public, on this day personally came and appeared _____ known to me to be the individual whose name is subscribed to the foregoing PARTIAL AFFIDAVIT AND RELEASE and being duly sworn, did state and acknowledge on his oath that he/she is the _____---- of [Subcontractor] and is authorized to execute and deliver the foregoing on behalf of [Subcontractor] as an act and deed of that entity for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____ , 20___.

_____
Notary Public in and for
the State of _____

(SEAL)

My Commission Expires: _____

CERTIFICATION OF COMPLETION
(By CONTRACTOR)

Reference is made to that certain Contract between Greater East End Management District and (Insert Name of Contractor) for (Describe work). Capitalized terms used herein and not defined herein shall have the meanings ascribed to such terms therein.

The undersigned hereby certifies that the Work on the Project known as (Describe Project) has been fully and properly completed in accordance with the Contract Documents.

_____
Contractor's Company Name

By: _____

Title: _____

Date: _____

CERTIFICATION OF COMPLETION
(By Subcontractor)

Reference is made to that certain Contract between Greater East End Management District and (Insert Name of Subcontractor) for (Describe work). Capitalized terms used herein and not defined herein shall have the meanings ascribed to such terms therein.

The undersigned hereby certifies that the (Describe Work Performed) _____
_____
_____
work performed by us on the Project known as (Describe Project) has been fully and properly completed in accordance with the Contract Documents.

_____
Subcontractor's Company Name

By: _____

Title: _____

Date: _____

X. Statutory Performance & Payment Bonds

STATUTORY PERFORMANCE BOND
PURSUANT TO CH. 2253 TEXAS GOVERNMENT CODE

(PENALTY OF THIS BOND MUST BE 100% OF CONTRACT PRICE)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (hereinafter called the Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of ____ _____, with its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto Greater East End Management District (hereinafter called the Obligee) in the amount of _____ _____Dollars ($ _____), for the payment whereof the said Surety and Principal jointly and severally bind themselves and their officers, directors, executors, successors and assigns as follows.

WHEREAS, THE Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__, to _____ _____ which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the contract and shall in all respects duly and faithfully observe and perform all and singular the covenants, obligations, conditions and agreements in and by said contract agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said contract and the plans, drawings and specifications which are a part thereof, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said Code to the same extent as if it were copied at length herein.

SURETY, FOR VALUE RECEIVED, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or the work to be performed thereunder, or the plans, specifications or drawings accompanying same.

IN WITNESS WHEREOF, of said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20__.

_____
Witness: Individual or Firm

_____
Corporate Secretary – Signature

_____
Principal – Name of Contractor – Typed

_____
Principal's Owner or Officer – Signed

_____
Surety – Typed

By: _____
Attorney-in-Fact
(Power of Attorney must be attached hereto)

GREATER EAST END MANAGEMENT DISTRICT

Approved _____, 20__

By _____
Executive Director

Approved as to form:
_____
Counsel

Resident Texas Agent for Service:

Name: _____

Address: _____

The address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the following toll free number: 1-800-578-4677

STATUTORY PAYMENT BOND
PURSUANT TO CH. 2253 TEXAS GOVERNMENT CODE

(PENALTY OF THIS BOND MUST BE 100% OF CONTRACT PRICE)

KNOW ALL MEN BY THESE PRESENTS:

That, _____ (hereinafter called the Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of _____ _____, with its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto Greater East End Management District (hereinafter called the Obligee) in the amount of _____ _____Dollars ($ _____), for the payment whereof the said surety and Principal jointly and severally bind themselves and their officers, directors, executors, successors and assigns as follows.

WHEREAS, THE Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__, to construct _____

_____ which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to it or a subcontractor in the prosecution of the work provided for in said contract, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended, and all liabilities on this bond to all such claimants shall be determined in accordance with the provisions of said Code to the same extent as if it were copied at length herein.

SURETY, FOR VALUE RECEIVED, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or the work to be performed thereunder, or the plans, specifications or drawings accompanying same.

IN WITNESS WHEREOF, of said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20__.

_____
Witness: Individual or Firm

_____
Corporate Secretary – Signature

_____
Principal – Name of Contractor – Typed

_____
Principal's Owner or Officer – Signed

_____
Surety – Typed

By: _____
Attorney-in-Fact
(Power of Attorney must be attached hereto)

GREATER EAST END MANAGEMENT DISTRICT

Approved _____, 20__

By _____
Executive Director

Approved as to form:

_____
Counsel

Resident Texas Agent for Service:

Name: _____

Address: _____

The address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the following toll free number: 1-800-578-4677.

XI. TECHNICAL SPECIFICATIONS

Summary	Section 011000
Unit Prices	Section 012200
Substitution Procedures	Section 012500
Contract Modification Procedures	Section 012600
Payment Procedures	Section 012900
Project Management and Coordination	Section 013100
Submittal Procedures	Section 013300
Execution	Section 017300
Closeout Procedures	Section 017700
Project Record Documents	Section 017839
Pipe and Tube Railings	Section 055213
Site Furnishings	Section 129300
Exterior Lighting	Section 265600
Site Preparation	Section 311100
Unit Paving	Section 321400
Planting Irrigation	Section 328400
Plants	Section 329300
Exterior Landscape Maintenance	Section 329301

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work under separate contracts.
5. Access to site.
6. Coordination with occupants.
7. Work restrictions.
8. Specification and drawing conventions.
9. Coordination of work.

1.2 PROJECT INFORMATION

A. Project Identification: Greater East End Management District, Paige Street Pocket Park & Trail.

1. Project Location: Harrisburg Boulevard, Houston, Texas.

B. Owner: Greater East End Management District.

1. Owner's Representative: Robert Fiederlein, 3211 Harrisburg Boulevard, Houston, Texas, 77003, 713-928-9916.

C. Architect: Clark Condon Associates, 10401 Stella Link Road, Houston, Texas, 77025, 713-871-1414.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of the Project is defined by the Contract Documents and consists of the following:

1. Concrete and clay paver installation, irrigation, planting and installation of Owner provided fixtures.

1.4 PHASE CONSTRUCTION

A. Construction access will be limited because of work being performed by others in the area. Construction phasing will be required to accommodate different phases of construction.

B. Phase One of this Contract shall include all work from Doweling Street to Delano Street. Coordination with work by others will be required in this area.

C. Phase Two of construction will be the pocket park, Delano Street to Paige Street. Coordination with work by others will also be required in this area.

1.5 WORK UNDER SEPARATE CONTRACTS

A. Work under separate contracts include work by Harris County, Houston Rapid Transit and City of Houston.

1.6 ACCESS TO SITE

A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

B. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

C. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1.7 COORDINATION WITH OCCUPANTS

A. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.

1. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

1.8 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work to normal business working hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, except as otherwise indicated.

C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. Notify Owner not less than two days in advance of proposed utility interruptions.
2. Obtain Owner's written permission before proceeding with utility interruptions.

D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Owner's written permission before proceeding with disruptive operations.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

1.10 COORDINATION OF WORK

A. Refer to Section 01312 - Coordination and Meetings.

B. Prior to commencement of construction, notify Construction Services Section, Office of the City Engineer (832-394-9100) to ensure all necessary and appropriate permits have been obtained.

C. Obtain all required permits, including lane closures, excavations and notification of tree removal, sanitary, water line, storm sewer, and street cut. Coordinate inspections with City utility inspectors.

D. Existing overhead power lines cross the project area in several locations. The contractor shall coordinate with CenterPoint Energy during the various construction phases of the project. Existing gas lines are located at various locations throughout the project. The contractor shall perform a critical locate of all these locations to ensure that acceptable clearance is available prior to construction. Contact CenterPoint Energy by calling the Utility Coordinating Committee at 713-223-4567 or 1-800-669-8344 a minimum of 48 hours prior to construction to have main and/or service lines field located. Contractor is fully responsible for any damages caused by failure to exactly locate and preserve these underground facilities. Contractor is required to restore electrical service to the street lights within 48 hours of disruption.

E. Contact AT&T at 1-800-344-8377 a minimum of 48 hours prior to construction to have main and/or service lines field located. contractor is fully responsible for any damages caused by failure to exactly locate and preserve these underground facilities. When excavating within eighteen inches (18") of indicated location of AT&T facilities, all excavations must be accomplished using non-mechanized procedures. Contractor shall expose AT&T facilities.

1. Brace and support AT&T facilities when working within close proximity as required. Avoid disturbing or damaging AT&T facilities. No separate pay.

F. Prior to construction within twenty-five (25) feet of a private pipeline, the One-Call notification system must be used. Place call to all three One-Call centers in the State of Texas:

1. TESS (Texas) One-Call 1-800-344-8377
2. Texas One-Call 1-800-245-4545
3. Texas (Lone Star) One-Call 1-800-669-8344

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

B. Related Section:

1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.2 DEFINITIONS

A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.

B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.

C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012200

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

1.2 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

    a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
    b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
    c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
    d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
    e. Samples, where applicable or requested.
    f. Certificates and qualification data, where applicable or requested.
    g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
    h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
    i. Research reports evidencing compliance with building code in effect for Project.
    j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided

within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.

k. Cost information, including a proposal of change, if any, in the Contract Sum.

l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.

m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.

b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied:

a. Requested substitution is consistent with the Contract Documents and will produce indicated results.

b. Requested substitution will not adversely affect Contractor's construction schedule.

c. Requested substitution has received necessary approvals of authorities having jurisdiction.

d. Requested substitution is compatible with other portions of the Work.

e. Requested substitution has been coordinated with other portions of the Work.

f. Requested substitution provides specified warranty.

g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Not allowed.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
2. Within 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

    a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    c. Include costs of labor and supervision directly attributable to the change.
    d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
    e. Quotation Form: forms acceptable to Architect.

B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: Use form acceptable to Architect.

1.4 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.5 CONSTRUCTION CHANGE DIRECTIVE

A. Work Change Directive: Architect may issue a Work Change Directive on AIA Document G714. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Correlate line items in the schedule of values with other required administrative forms and schedules, including the following:

    a. Application for Payment forms with continuation sheets.
    b. Submittal schedule.
    c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Architectat earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
3. Subschedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.

B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:

    a. Project name and location.
    b. Name of Architect.
    c. Architect's project number.
    d. Contractor's name and address.
    e. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Document G703.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of Contract Sum.

a. Include separate line items under Contractor and principal subcontracts for project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.

4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

   a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.

9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified and paid for by Owner.

   1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: Progress payments shall be submitted by the 25th of the month. Progress payments shall be submitted by the 5th of the month for payment on the 15th of the same month.

C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

   1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
   2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

E. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit conditional final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of values.
3. Contractor's construction schedule (preliminary if not final).
4. Schedule of unit prices.
5. Submittal schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. List of Contractor's principal consultants.
8. Copies of building permits.
9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
10. Initial progress report.
11. Report of preconstruction conference.
12. Certificates of insurance and insurance policies.

H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.

2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. AIA Document G706-1994, "Contractor's Affidavit of Payment of Debts and Claims."
5. AIA Document G706A-1994, "Contractor's Affidavit of Release of Liens."
6. AIA Document G707-1994, "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.
8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
9. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Coordination drawings.
2. Requests for Information (RFIs).
3. Project Web site.
4. Project meetings.

B. Related Sections:
1. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information from each other during construction.

1.3 COORDINATION

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors] to avoid

conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's construction schedule.
2. Preparation of the schedule of values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.
9. Project closeout activities.

1.4 COORDINATION DRAWINGS

A. Coordination Drawings, General: Prepare coordination drawings in accordance with requirements in individual Sections, where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.

1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:

    a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
    b. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Organize coordination drawings as follows:

1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid.
2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings.
3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.

6. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility.

1.5 REQUESTS FOR INFORMATION (RFIs)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Project number.
3. Date.
4. Name of Contractor.
5. Name of Architect.
6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

C. RFI Forms: AIA Document G716.

D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:

a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for coordination information already indicated in the Contract Documents.
d. Requests for adjustments in the Contract Time or the Contract Sum.
e. Requests for interpretation of Architect's actions on submittals.
f. Incomplete RFIs or inaccurately prepared RFIs.

2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."

    a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

E. On receipt of Architect'saction, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.6 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.

B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.

1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Discuss items of significance that could affect progress, including the following:

    a. Tentative construction schedule.
    b. Phasing.
    c. Critical work sequencing and long-lead items.
    d. Designation of key personnel and their duties.
    e. Procedures for processing field decisions and Change Orders.
    f. Procedures for RFIs.
    g. Procedures for testing and inspecting.
    h. Procedures for processing Applications for Payment.
    i. Distribution of the Contract Documents.
    j. Submittal procedures.
    k. Sustainable design requirements.
    l. Preparation of record documents.
    m. Use of the premises.
    n. Work restrictions.
    o. Working hours.
    p. Owner's occupancy requirements.
    q. Responsibility for temporary facilities and controls.
    r. Procedures for moisture and mold control.
    s. Procedures for disruptions and shutdowns.
    t. Construction waste management and recycling.
    u. Parking availability.
    v. Office, work, and storage areas.
    w. Equipment deliveries and priorities.
    x. First aid.
    y. Security.
    z. Progress cleaning.

3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

    a. Contract Documents.
    b. Options.
    c. Related RFIs.
    d. Related Change Orders.
    e. Purchases.
    f. Deliveries.
    g. Submittals.
    h. Review of mockups.

i. Possible conflicts.
j. Compatibility problems.
k. Time schedules.
l. Weather limitations.
m. Manufacturer's written recommendations.
n. Warranty requirements.
o. Compatibility of materials.
p. Acceptability of substrates.
q. Temporary facilities and controls.
r. Space and access limitations.
s. Regulations of authorities having jurisdiction.
t. Testing and inspecting requirements.
u. Installation procedures.
v. Coordination with other work.
w. Required performance results.
x. Protection of adjacent work.
y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Conduct progress meetings at biweekly intervals.

1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

1) Review schedule for next period.

b. Review present and future needs of each entity present, including the following:

1) Interface requirements.
2) Sequence of operations.
3) Status of submittals.

4) Deliveries.
5) Off-site fabrication.
6) Access.
7) Site utilization.
8) Temporary facilities and controls.
9) Progress cleaning.
10) Quality and work standards.
11) Status of correction of deficient items.
12) Field observations.
13) Status of RFIs.
14) Status of proposal requests.
15) Pending changes.
16) Status of Change Orders.
17) Pending claims and disputes.
18) Documentation of information for payment requests.

3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.

   a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Sections:

1. Division 01 Section "Payment Procedures" for submitting schedules and reports, including Contractor's construction schedule.
2. Division 01 Section "Close-Out Procedures" for submitting operation and maintenance manuals.
3. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.

B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or modifications to submittals noted by the Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

B. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 15 days for review of each resubmittal.

C. Identification and Information: Place a permanent label or title block on each paper copy submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Include the following information for processing and recording action taken:

a. Project name.
b. Date.
c. Name of Architect.
d. Name of Construction Manager.
e. Name of Contractor.
f. Name of subcontractor.
g. Name of supplier.
h. Name of manufacturer.
i. Submittal number or other unique identifier, including revision identifier.

1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

j. Number and title of appropriate Specification Section.
k. Drawing number and detail references, as appropriate.
l. Location(s) where product is to be installed, as appropriate.
m. Other necessary identification.

D. Identification and Information: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.

a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).

3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
4. Include the following information on an inserted cover sheet:

a. Project name.
b. Date.
c. Name and address of Architect.
d. Name of Construction Manager.
e. Name of Contractor.
f. Name of firm or entity that prepared submittal.
g. Name of subcontractor.
h. Name of supplier.
i. Name of manufacturer.
j. Number and title of appropriate Specification Section.
k. Drawing number and detail references, as appropriate.
l. Location(s) where product is to be installed, as appropriate.
m. Related physical samples submitted directly.
n. Other necessary identification.

E. Options: Identify options requiring selection by the Architect.

F. Deviations: Identify deviations from the Contract Documents on submittals.

G. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.

H. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.

1. Transmittal Form: Use Contractor's form.
2. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.

3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

K. Use for Construction: Use only final submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

1. Action Submittals: Submit three paper copies of each submittal, unless otherwise indicated. Architect will return two copies.
2. Informational Submittals: Submit two paper copies of each submittal, unless otherwise indicated. Architect will not return copies.
3. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

    a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
    b. Provide a notarized statement on original paper copy certificates and certifications where indicated.

5. Test and Inspection Reports Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

    a. Manufacturer's catalog cuts.
    b. Manufacturer's product specifications.
    c. Standard color charts.
    d. Statement of compliance with specified referenced standards.
    e. Testing by recognized testing agency.
    f. Application of testing agency labels and seals.
    g. Notation of coordination requirements.
    h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:

    a. Wiring diagrams showing factory-installed wiring.
    b. Printed performance curves.
    c. Operational range diagrams.
    d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data before or concurrent with Samples.
6. Submit Product Data in the following format:

    a. Three paper copies of Product Data, unless otherwise indicated. Architect will return two copies.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

    a. Identification of products.
    b. Schedules.
    c. Compliance with specified standards.
    d. Notation of coordination requirements.
    e. Notation of dimensions established by field measurement.
    f. Relationship and attachment to adjoining construction clearly indicated.
    g. Seal and signature of professional engineer if specified.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
3. Submit Shop Drawings in the following format:

    a. Three opaque copies of each submittal. Architect will retain two copies; remainder will be returned.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:

    a. Generic description of Sample.
    b. Product name and name of manufacturer.
    c. Sample source.
    d. Number and title of applicable Specification Section.

3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned.

1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

1. Submit product schedule in the following format:

a. PDF electronic file.
b. Three paper copies of product schedule or list, unless otherwise indicated. Architect will return two copies.

F. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."

H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.

1. Submit subcontract list in the following format:

    a. PDF electronic file.
    b. Number of Copies: Three paper copies of subcontractor list, unless otherwise indicated. Architect will return two copies.

J. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on American Welding Society (AWS) forms. Include names of firms and personnel certified.

M. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

N. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

Q. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

R. Product Test Reports: Submit written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

S. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

T. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."

U. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

V. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

W. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

X. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 01 Section "Closeout Procedures."

C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S AND CONSTRUCTION MANAGER'S ACTION

A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

D. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. Installation of the Work.
4. Cutting and patching.
5. Coordination of Owner-installed products.
6. Progress cleaning.
7. Starting and adjusting.
8. Protection of installed construction.
9. Correction of the Work.

B. Related Sections:

1. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1.3 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

1. For projects requiring compliance with sustainable design and construction practices and procedures, utilize products for patching that comply with requirements of Division 01 Section "Sustainable Design Requirements."

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to the Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of the Contractor, submit a request for information to Architect according to requirements in Division 01 Section "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.

1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
3. Inform installers of lines and levels to which they must comply.
4. Check the location, level and plumb, of every major element as the Work progresses.
5. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.

3.5 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

G. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and

items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 CUTTING AND PATCHING

A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Temporary Support: Provide temporary support of work to be cut.

C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

D. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
6. Proceed with patching after construction operations requiring cutting are complete.

G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.7 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: Comply with qualification requirements in Division 01 Section "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.10 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Restore permanent facilities used during construction to their specified condition.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Final cleaning.

B. Related Sections:
1. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
2. Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.
3. Releases and Certification of Completion.

1.2 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise Owner of pending insurance changeover requirements.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.

12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

1.3 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

3. Submit list of incomplete items in the following format:
   a. Three paper copies, unless otherwise indicated. Architect will return two copies.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

1. Use cleaning products that meet Green Seal GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:

a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Remove labels that are not permanent.
j. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.

k. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

END OF SECTION 017700

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:

1. Record Drawings.
2. Record Specifications.
3. Record Product Data.

B. See Divisions 02 through 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.2 SUBMITTALS

A. Record Drawings: Comply with the following:

1. Number of Copies: Submit 1 set of marked-up Record Prints.
2. Number of Copies: Submit copies of Record Drawings as follows:

a. Submittal: Submit 1 set of marked-up Record Prints, and the following:

1) Copies printed from Record: Three. Print each Drawing, whether or not changes and additional information were recorded.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.

1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.

a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.

2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
2. Identification: As follows:

a. Project name.
b. Date.
c. Designation "PROJECT RECORD DRAWINGS."
d. Name of Architect.
e. Name of Contractor.

2.2 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.

B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839

SECTION 055213 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Steel tube railings.

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Handrails:

a. Uniform load of 50 lbf/ft. applied in any direction.
b. Concentrated load of 200 lbf applied in any direction.
c. Uniform and concentrated loads need not be assumed to act concurrently.

2. Top Rails of Guards:

a. Uniform load of 50 lbf/ ft. applied in any direction.
b. Concentrated load of 200 lbf applied in any direction.
c. Uniform and concentrated loads need not be assumed to act concurrently.

1.3 SUBMITTALS

A. Product Data: For mechanically connected railings, grout, anchoring cement, and paint products.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

C. Samples: For each exposed finish required.

D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

2.2 METALS

A. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails, unless otherwise indicated.

B. Steel and Iron:

1. Tubing: ASTM A 500 (cold formed).
2. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
3. Plates, Shapes, and Bars: ASTM A 36/A 36M.
4. Castings: Either gray or malleable iron, unless otherwise indicated.

    a. Gray Iron: ASTM A 48/A 48M, Class 30, unless another class is indicated or required by structural loads.
    b. Malleable Iron: ASTM A 47/A 47M.

5. Expanded Metal: ASTM F 1267, Type I (expanded), Class 1 (uncoated).
6. Woven-Wire Mesh: Intermediate-crimp, 2-inch woven-wire mesh, made from 0.135-inch nominal diameter wire complying with ASTM A 510 (ASTM A 510M).

2.3 MISCELLANEOUS MATERIALS

A. Fasteners: Provide concealed fasteners, unless unavoidable or standard for railings indicated.

1. Steel Railings: Plated steel fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposited zinc coating.

B. Anchors: Provide anchors, fabricated from corrosion-resistant materials with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and equal to four times the load imposed when installed in concrete, as determined by testing per ASTM E 488.

C. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

D. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79.

E. Zinc-Rich Primer: Complying with SSPC-Paint 20 or SSPC-Paint 29 and compatible with topcoat.

F. Shop Primer for Galvanized Steel: Zinc-dust, zinc-oxide primer compatible with finish paint systems indicated, and complying with SSPC-Paint 5.

G. Grout and Anchoring Cement: Factory-packaged, nonshrink, nonmetallic grout complying with ASTM C 1107; or water-resistant, nonshrink anchoring cement; recommended by manufacturer for exterior use.

2.4 FABRICATION

A. General: Fabricate railings to comply with design, dimensions, and details indicated, but not less than that required to support structural loads.

B. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

C. Welded Connections for Aluminum Pipe: Fabricate railings to interconnect members with concealed internal welds, using manufacturer's standard system of sleeve and socket fittings.

D. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings.

E. Form changes in direction by bending.

F. Form curves by bending in jigs to produce uniform curvature; maintain cross section of member throughout bend without cracking or otherwise deforming exposed surfaces.

G. Close exposed ends of railing members with prefabricated end fittings.

H. Provide wall returns at ends of wall-mounted handrails, unless otherwise indicated.

I. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work, unless otherwise indicated.

2.5 FINISHES

A. Steel and Iron:

1. Galvanized Railings: Hot-dip galvanize railings, after fabrication, to comply with ASTM A 123/A 123M. Provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
2. Shop-Primed Galvanized Railings: After galvanizing, clean railings, treat with metallic-phosphate process, and apply primer to comply with SSPC-PA 1.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation.

1. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
2. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

B. Coat concealed surfaces of aluminum that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

C. Anchor posts in concrete by inserting into formed or core-drilled holes and grouting annular space.

D. Adjusting and Cleaning:

1. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting.
2. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

END OF SECTION 055213

SECTION 129300 - SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Bicycle racks.
2. Trash receptacles.
3. Planters.
4. Drinking fountain.

PART 2 - PRODUCTS

2.1 MATERIALS

A. All site furnishings are provided by the Owner.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine subgrades, finished surfaces and installation conditions. Do not start site furnishings work until unsatisfactory conditions are corrected.

3.2 LOCATION AND INSTALLATION

A. All locations shall be staked by Contractor and approved by Owner's representative prior to commencement of work. Location shall be as indicated on drawings.

3.3 INSTALLATION

A. Site Furniture

1. Assemble sections per manufacturer's recommendations.
2. Install level and plumb. Shim as required to obtain an unyielding surface.
3. Touch up all abraded, welded and scratched surfaces with matching rust inhibitive paint supplied by manufacturer.

PART 4 – COMPLETION

4.1 CLEAN-UP

A. The Contractor shall clean the site daily from trash and debris resulting from construction operations at no additional cost to Owner. All walks, roads and circulation routes shall be kept clean and free from debris, material and equipment.

B. Upon completion of the work covered by this section, the Contractor shall clean up all areas by removing spoil piles, surplus material and equipment from the site. The ground surface shall be restored to its original condition.

END OF SECTION 129300

SECTION 265600 - EXTERIOR LIGHTING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Exterior luminaires with lamps and ballasts.
2. Luminaire-mounted photoelectric relays.
3. Poles and accessories.

PART 2 - PRODUCTS

2.1 LUMINAIRES, GENERAL REQUIREMENTS

A. All light furnishings are provided by the Owner.

PART 3 - EXECUTION

3.1 LUMINAIRE INSTALLATION

A. All locations shall be staked by Contractor and approved by Owner's Representative prior to commencement of work. Locations shall be as indicated on drawings.

B. Install lamps in each luminaire.

C. Fasten luminaire to indicated structural supports.

1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

D. Adjust luminaires that require field adjustment or aiming. Include adjustment of photoelectric device to prevent false operation of relay by artificial light sources.

3.2 POLE INSTALLATION

A. Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on the pole.

B. Clearances: Maintain the following minimum horizontal distances of poles from surface and underground features, unless otherwise indicated on Drawings:

1. Fire Hydrants and Storm Drainage Piping: 60 inches.

2. Water, Gas, Electric, Communication, and Sewer Lines: 10 feet.
3. Trees: 15 feet.

C. Concrete Pole Foundations: Set anchor bolts according to anchor-bolt templates furnished by pole manufacturer. Concrete materials, installation, and finishing requirements are specified in Division 03 Section "Cast-in-Place Concrete."

D. Raise and set poles using web fabric slings (not chain or cable).

3.3 CORROSION PREVENTION

A. Aluminum: Do not use in contact with earth or concrete. When in direct contact with a dissimilar metal, protect aluminum by insulating fittings or treatment.

B. Steel Conduits: Comply with Division 26 Section "Raceway and Boxes for Electrical Systems." In concrete foundations, wrap conduit with 0.010-inch-thick, pipe-wrapping plastic tape applied with a 50 percent overlap.

3.4 GROUNDING

A. Ground metal poles and support structures according to Division 26 Section "Grounding and Bonding for Electrical Systems."

1. Install grounding electrode for each pole, unless otherwise indicated.
2. Install grounding conductor pigtail in the base for connecting luminaire to grounding system.

B. Ground nonmetallic poles and support structures according to Division 26 Section "Grounding and Bonding for Electrical Systems."

1. Install grounding electrode for each pole.
2. Install grounding conductor and conductor protector.
3. Ground metallic components of pole accessories and foundations.

END OF SECTION 265600

SECTION 311100 - SITE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Visit site to ascertain actual conditions and items related to the work of this section.
2. Provide necessary protection for persons, existing buildings, improvements, utilities and property including tree protection fencing.
3. Remove and grub all vegetation, noted on the drawings.
4. Demolition and removal of above and below grade improvements as required for new work, including but not limited to existing paving walk, shell material, etc.
5. Mobilization of equipment at the site.
6. Providing requirements for personnel and facilities.
7. Securement of any temporary traffic channelizing devices required for the safe construction of this project.
8. Removing above- and below-grade site improvements.
9. Disconnecting and capping or sealing site utilities.

1.2 MATERIAL OWNERSHIP

A. Except for stripped topsoil or other materials indicated to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.3 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.

C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

D. Do not commence site clearing operations until temporary erosion and sedimentation control measures are in place.

E. Contractor shall provide access to utility owners, and others as designated, to the Work site at all times to relocate, service, and inspect their facilities. The Contractor shall cooperate with utility owners and others in facilitating such work so as not to delay the Work of this Contract.

1.4 CONTINUITY OF SERVICE

A. Contractor shall ensure continuity of utility service and shall maintain, in a safe and satisfactory operating condition, all overhead, surface and subsurface utilities.

PART 2 - PRODUCTS - Not Applicable

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Locate and clearly flag trees and vegetation to remain or to be relocated.

C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

D. The location of staging areas and equipment shall be subject to the approval of the Owners Representative and Owner and shall be site close to that portion of the Work for which such items will be used.

E. The Contractor may, at his discretion, erect a temporarily fenced area for securing equipment, materials, etc. as directed by the Owners Representative. Owner will not assume any responsibility for security of any materials, equipment, etc. during construction of the project.

3.2 TEMPORARY TRAFFIC

A. Temporary traffic channelizing devices shall be installed in accordance with the requirements of Part VI of the TxDOT manual on Uniform Traffic Control Devices for Streets and Highways.

B. Contractor shall submit his request and plan for temporarily channelizing traffic to Owners Representative and Owner for approval as appropriate.

C. Devices shall be maintained as necessary during the course of the Work, and shall be removed from the Site when no longer needed, or as otherwise directed by Owners Representative to Owner.

3.3 CONSTRUCTION VEHICULAR TRAFFIC

A. Construction vehicular traffic shall be restricted to routes approved by Owners Representative and Owner.

3.4 PEDESTRIAN TRAFFIC

A. Whenever pedestrian circulation is interrupted, flashing warning lights shall be employed to alert pedestrians.

3.5 UTILITIES

A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.

1. Arrange with utility companies to shut off indicated utilities.

B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Architect not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Architect's written permission.

3.6 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

3.7 DISPOSAL

A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

1. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

3.8 CLEANUP

A. Cleanup all debris caused by the work of this Section, keeping the premises clean and neat at all times.

END OF SECTION 311000

SECTION 321400 - UNIT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Concrete pavers set in aggregate setting beds.

2. Clay pavers set in aggregate setting beds.

1.2 SUBMITTALS

A. Product Data: For materials other than water and aggregates.

B. Samples for unit pavers and joint materials.

C. Clay pavers to be provided by Owner.

1.3 QUALITY ASSURANCE

A. The Contractor is responsible for correction of work which does not conform to the specified requirements, including strength, tolerances and colors. Correct deficient materials as directed by the Owner.

B. Installer: a firm with a minimum of (3) three years experience in the successful installation of similar pavers in similar quantities. Firm must provide Owner a list of jobs completed which can be inspected by Owner or Owner's Representative. A minimum of 2 of these completed jobs must be located in the area similar to this job.

1.4 WARRANTY

A. Warrant the work specified herein for 1 year against becoming unserviceable or causing an objectionable appearance resulting from either defective or non conforming materials and workmanship.

1.5 PRODUCT HANDLING

A. Concrete pavers shall be delivered and unloaded at jobsite on pallets and bound in shrink wrap plastics covers to prevent rust staining from steel strapping and in such a manner that no damage occurs to product during hauling, handling or unloading at the jobsite.

1.6 MOCK-UPS

A. Provide layout and pattern mock-ups on jobsite at approved location.

B. Contractor shall provide, for approval by Owners Representative, a mock-up of each type of unit paver pattern specified. These are to be approved by Owner's Representative prior to commencement of whole pattern.

C. Mock-ups shall remain on the jobsite for the duration of the project unless otherwise directed by Owners Representative.

D. The first 4'X4' section of each type of paver on the project shall be considered a mock-up.

1.7 PROJECT CONDITIONS

A. Cold-Weather Protection: Do not use frozen materials or build on frozen subgrade or setting beds.

B. Weather Limitations for Bituminous Setting Bed: Install bituminous setting bed only when ambient temperature is above 40 deg F (4 deg C) and when base is dry.

C. Weather Limitations for Mortar and Grout:

1. Cold-Weather Requirements: Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
2. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602. Do not apply mortar to substrates with temperatures of 100 deg F (38 deg C) and higher.

PART 2 - PRODUCTS

2.1 UNIT PAVERS

A. Concrete Pavers: Solid interlocking paving units complying with ASTM C 936 and resistant to freezing and thawing when tested according to ASTM C 67, made from normal-weight aggregates.

1. Paver type, size & color shall be as stated on the drawings.

2.2 ACCESSORIES

A. Cork Joint Filler: Preformed strips complying with ASTM D 1752, Type II.

B. Compressible Foam Filler: Preformed strips complying with ASTM D 1056, Grade 2A1.

2.3 SAND SETTING-BED MATERIALS

A. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33 for fine aggregate.

B. HP polymeric sand by Techniseal.

C. Filter Fabric: Soil Separator or Filter Fabric shall be Polyspun XL Soil Separator; heavy duty, non-woven, with permeability minimum 275 gallons of water per min. per square foot.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.

B. Cut unit pavers with motor-driven masonry saw equipment to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible.

1. For concrete pavers, a block splitter may be used.

2. For clay pavers, saw cutter...

C. Joint Pattern: As indicated.

D. Tolerances: Do not exceed 1/16-inch (1.6-mm) unit-to-unit offset from flush, 1/4 inch in 10 feet (6 mm in 3 m) from level, or indicated slope, for finished surface of paving.

E. Expansion and Control Joints: Provide for sealant-filled joints at locations and of widths indicated. Provide compressible foam filler as backing for sealant-filled joints. Install joint filler before setting pavers. Sealant materials and installation are specified in Division 07 Section "Joint Sealants."

F. Expansion and Control Joints: Provide cork joint filler at locations and of widths indicated. Install joint filler before setting pavers. Make top of joint filler flush with top of pavers.

G. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.

3.2 SAND SETTING

A. Sand:

1. Spread a maximum of 1" sharp sand over the area to receive concrete pavers.
2. Screed until level to the grade and profile required. Minimum depth of sand should be 1" and maximum depth shall be 1 1/2".
3. Pavers shall be clean and free of foreign materials before installation.

4. Installation should start from a corner or straight edge and proceed forward over the undisturbed sand laying course. Installation shall be carried out where possible to minimize cutting pavers.
5. Paving work shall be plumb, level and true to line and grade; shall be installed 1/8" higher than adjacent paved surfaces after compaction to allow for settlement. All edges must be retained as per Detail.
6. Paving units shall be installed hand tight and level on the undisturbed sand laying course. String lines should be used to hold pattern lines true. Joint spaces shall not exceed 1/8".
7. Cutting of paving units to be done only with an approved masonry saw. Contractor shall take note of areas designated as 'no cut' paver areas. Contractor to adjust walk width to accommodate full size pavers only.
8. After initial placement of pavers, sweep and vibrate dry joint sand into the joints using a plate vibrator until all joints are completely filled with joint sand. The number of passes with the vibrator and effort required to produce completely filled joints will vary on gradation, moisture content, weather, adjustment of the vibrating plate, etc. Vibration and filling of joints is to be completed to within 6’ of any unconfined edge at the end of each day.
9. Visually and physically inspect all joints to insure that they are completely filled and compacted. Refill and re-compact joints until a rigid putty knife cannot be inserted more than ¼” into the joint.
10. Excess sand shall be swept into the joints or disposed of from the surface area when joints are completely filled.

3.3 ATTIC STOCK

A. Contractor shall provide 50 additional pavers of each type used to the Owner for attic stock.

END OF SECTION 04810

SECTION 328400 - PLANTING IRRIGATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes piping, valves, sprinklers, accessories, controls, and wiring for an automatically control irrigation system.

1.2 DEFINITIONS

A. Irrigation Lateral Lines: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.

B. Irrigation Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

1.3 SUBMITTALS

A. Product Data: Include pressure ratings, rated capacities, and settings of selected models for the following:
1. Control valves.
2. Sprinkler heads and emission devices.
3. Irrigation controller.
4. Pipe and fittings.
5. Wire and connectors.
6. Solvents.
7. Valve boxes.

B. Evidence of State of Texas irrigation license and required experience.

C. Operation and maintenance instructions.

D. Spares and Special Tools – Provide Owner with 2 spare sprinkler heads of each size and type.

1.4 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Installer – Installation of Irrigation System installation shall be performed under the direction of a State of Texas licensed irrigator with not less than 5 years experience in this type of work.

1.5 PRODUCT DELIVERY AND HANDLING

A. Materials shall be delivered in manufacturer's unopened packaging labeled to indicate manufacturer's name and product identification. Insure that packaging and labeling remain intact until installation. Materials shall be stored protected from the elements, including direct sunlight.

B. Pipes shall be handled so as to prevent being damaged and to maintain their straightness. Pipe ends shall be wrapped. Pipes shall be stored on beds the full length of the pipes. Damaged or dented pipes or fittings shall not be used.

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

A. Soft Copper Tube: ASTM B 88, Type L (ASTM B 88M, Type B), water tube, annealed temper.

1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
2. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.

B. Hard Copper Tube: ASTM B 88, Type K, water tube, drawn temper.

1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
2. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.

C. Mainline PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40.

1. PVC Socket Fittings, Schedule 40: ASTM D 2466.

D. Irrigation Lateral Line Pipe

1. Pipes ¾ inch diameter and larger: ASTM D 2231, PVC, 1120 or 1220, SDR 21.0, 200 PSI
2. Pipes ½ inch diameter: ASTM D 2241, PVC, 1120 or 1220, SDR 13.5, 315 PSI

E. FITTINGS FOR SOLVENT WELDED JOINTS

1. Schedule 40: ASTM D 2466

F. FITTINGS FOR THREADED JOINTS

1. ASTM D 2466, PVC, Schedule 40

2.2 GENERAL-DUTY VALVES

A. Bronze Gate Valves shall be MSS SP-80, Class 125, Type 1, nonrising-stem, bronze body with solid wedge, threaded ends, and malleable-iron handwheel.

2.3 REMOTE CONTROL VALVES

A. Plastic Automatic Control Valves shall be molded-plastic body, normally closed, diaphragm type with manual flow adjustment, and operated by 24-V ac solenoid.

B. Quick-Couplers shall be factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring-loaded or weighted, purple rubber-covered cap; hose swivel with ASME B1.20.7, 3/4-11.5NH threads for garden hose on outlet; and operating key.

C. Remote Control-Valve Boxes: Box and cover, with open bottom and openings for piping; designed for installing flush with grade. Include size as required for valves and service.

1. Valve boxes shall be heavy duty plastic 17 inch by 11-3/4 inch by 12 inch depth, black with black cover. Valve box shall be Series 1419, non-hinged, non-bolt cover, by Carson Industries, Inc., 1925 Street, LaVerne, CA 91750, 213-732-6265, or approved equal.
2. Valve boxes shall be heavy duty plastic 17 inch by 11-3/4 inch by 12 inch depth, purple with purple cover. Valve box shall be Series 1419, non-hinged, non-bolt cover, by Carson Industries, Inc., 1925 Street, LaVerne, CA 91750, 213-732-6265, or approved equal.
3. Valve boxes shall be precast concrete with compressive strength of concrete in exces of 4000 psi. Valve box shall be approximately 14 5/8” by 19 ¾” with bolt down cast iron traffic cover. Valve box shall be 36-T, by Brooks Products, or approved equal.

D. Gate Valve and Control Wire Splice Boxes

1. Control wire splice boxes shall be heavy duty plastic 10 inch diameter by 10-1/4 inch deep, black with black cover, No. 910-12B, by Carson Industries, Inc. or approved equal.
2. Valve boxes for quick couplers, wire splices and gate valves shall be precast concrete with compressive strength of concrete in excess of 4000 psi. Valve box shall be 12 ½ inch diameter by 10-1/2 inch deep, with cast iron cover. Valve box shall be No. 101, by Brooks Products, Inc. or approved equal.

E. Drainage Backfill: Cleaned gravel or crushed stone, graded from 3/8 inch minimum to 1 inch maximum.

2.4 SPRINKLERS

A. Description: Brass or plastic housing and corrosion-resistant interior parts designed for uniform coverage over entire spray area indicated, at available water pressure shall include.

1. Flush, Surface Sprinklers: Fixed pattern, with screw-type flow adjustment.
2. Bubblers: Fixed pattern, with screw-type flow adjustment.
3. Shrubbery Sprinklers: Fixed pattern, with screw-type flow adjustment.

4. Pop-up, Spray Sprinklers: Fixed pattern, with screw-type flow adjustment and stainless-steel retraction spring.
5. Pop-up, Rotary, Spray Sprinklers: Gear drive, full-circle and adjustable part-circle types.
6. Pop-up, Rotary, Impact Sprinklers: Impact drive, full-circle and part-circle types.
7. Aboveground, Rotary, Impact Sprinklers: Impact drive, full-circle and part-circle types.

2.5 SPRINKLER SPECIALTIES

A. Strainer/Filter Units: Brass or plastic housing, with corrosion-resistant internal parts; of size and capacity required for devices downstream from unit.

B. Emitters: PE or vinyl body.

1. Single-Outlet Emitters: To deliver the following flow at approximately 20 psig:

a. Flow: 1 gph.
b. Tubing Size: ¼" ID.

2. Outlet Caps: Plastic, for outlets without tubing.

C. Drip Tubes: 17mm, flexible PE or PVC tubing for emitters and other devices, of length indicated and with plugged end.

2.6 CONTROLLER(S)

A. Controller(s) shall be DC Type battery powered units as noted on the plans.
1. The controller shall have the specified number of stations. Each station shall have a time setting knob capable of being set for incrementally variable timing or set to omit the station from the irrigation cycle.
2. Controller shall have a 365 day calendar, event day off, water budget, cycle and soak and a master "on-off" switch.

2.7 WIRING

1. Low-Voltage, Branch-Circuit Cables: No. 14 AWG minimum, between controllers and automatic control valves; color-coded different from feeder-circuit-cable jacket color; with jackets of different colors for multiple-cable installation in same trench.
2. Splicing Materials: Manufacturer's packaged kit consisting of insulating, spring-type connector or crimped joint and epoxy resin moisture seal; suitable for direct burial.

2.8 REMOTE CONTROL VALVE TIES

A. Remote control valve ties shall be plastic tags with wire to attach numbered tag to valve.

2.9 SOLVENT CEMENT FOR SOLVENT WELDED JOINTS

A. CHRISTY'S RED HOT BLUE GLUE T. Christy Enterprises, Inc., 1207 W. Struck Avenue, No. E, Orange, CA 92667, 800-258-4583, or approved equal. Use a compatible primer recommended by the solvent cement manufacturer.

2.10 SEALANT FOR THREADED JOINTS UNDER CONSTANT PRESSURE

A. RECTOR SEAL LIQUID TEFLON by Rector Seal Corp., 2830 Produce Row, Houston, Texas 77023, 713-928-6423, or approved equal.

2.11 SLEEVES UNDER PAVING FOR CONTROL WIRE AND IRRIGATION LINES

A. ASTM D 2455, PVC, Schedule 40 sized as shown on drawings.

2.12 FITTINGS FOR THREADED JOINTS

A. ASTM D 2466, PVC, Schedule 80.

2.13 RAINFALL MONITOR

A. Provide a Mini-Clik by Glen Hilton Products or approved equal.

PART 3 - EXECUTION

3.1 EARTHWORK

A. Refer to Division 31 Section "Earth Moving" for excavating, trenching, and backfilling.

B. Location of Heads – Design location is represented as accurately as possible. Make minor adjustments on site with approval of Landscape Architect as necessary to ensure consistent and even spacing where applicable. Set all heads minimum 6" from back of curb and 4" from edge of concrete walls.

C. Install piping and wiring in sleeves under sidewalks, roadways, parking lots, and railroads.

D. Provide minimum cover over top of underground piping according to the following:

1. Irrigation Main Piping: Minimum depth of 18 inches below finished grade.
2. Circuit Piping: 12 inches.
3. Sleeves: 24 inches

E. BACKFILL - Backfill with clean material from excavation after obtaining Landscape Architect's approval. Remove organic material, as well as rocks and debris larger than 1 inch in diameter. Place acceptable backfill in 6 inch lifts and water jet all trenches.

F. EXISTING LAWNS – Where trenching is required across existing lawns, (or in even of changes or repairs after new lawn has been established), uniformly cut strips of sod 6 inches wider than trench. Remove sod in rolls of suitable size for handling and keep moistened until replanted.

1. Backfill trench to within 6 inches of finished grade and compact. Continue fill with acceptable topsoil and compact to bring sod even with existing lawn.
2. Replant sod within 2 days after removal, roll and water generously.
3. Resod and restore to original condition all sod areas not in healthy condition equal to adjoining lawns 30 days after replanting.

3.2 INSTALLATION

A. General - Unless otherwise indicated, Contractor shall comply with requirements of the governing Uniform Plumbing Code.

B. Pipes

1. Piping Mains and Laterals - Lay out sprinkler mainlines and perform line adjustments and site modifications to laterals prior to excavation. Lay pipe on solid subbase, uniformly sloped without humps or depressions.
2. PVC Pipe Assembly

    a. Cut PVC pipe square and de-burr. Clean pipe and fittings using primer as recommended by the PVC pipe manufacturer. Use purple tinted primer to aid in visual inspection.
    b. Apply a thin even flow coat of PVC solvent cement to inside of the fitting and pipe mating surface. Cure joints as recommended by the manufacturer and keep pipe and fitting out of service during curing period. Construct watertight joints equal or greater in strength than the pipe. Do not tap pipe at fittings.

3. Install plastic pipe in dry weather, when temperature is above 40 degrees F. and in accordance with manufacturer's written instructions. Allow joints to cure at least 24 hours at temperature above 40 degrees F. before testing.
4. Plastic pipe shall be snaked in the trenches in a manner to provide for expansion and contraction as recommended by pipe manufacturer.

C. Sleeves Under Paving - Roadway sleeves under paving may be existing as shown on drawings. Where boring is required for new sleeves (refer to drawings), it shall be a "wet bore." Install sleeves 12" beyond edge of pavement. Perform trench and backfill in accordance with these specifications.

D. Irrigation Heads

1. Flush irrigation lines with full head of water and install heads after hydrostatic test is completed.
2. Install heads at manufacturer's recommended heights.
3. Locate part-circle heads to maintain a minimum distance of 4, 12, 24, 48 inches from walls and 2 inches form other boundaries, unless otherwise indicated.

4. Check for uniformity of coverage and pattern correctness. Adjust for 100% coverage where required.
5. Install nozzles with water running at reduced pressure starting with the head closest to the valve.
6. Adjust arcs and radius at normal operating pressure.

E. Drip Tubing

1. Tubing installed in planting beds is to be placed at spacing indicated on drawings in shallow trench and covered with planting backfill mix 1”-2” deep and then covered with mulch. Tubing is to be placed after bed preparation is complete and plant material is planted. Refer to Section 329300 – Plants.
2. Drip tubing is to be placed on top of root balls of trees in planting beds to allow for even watering of trees.
3. All tubing is to be reviewed by Owner’s Representative prior to burying.

F. Electric Remote Control Valves

1. Adjust automatic control valves to provide flow rate at rated operating pressure required for each irrigation section.
2. Install valves in valve boxes, arranged for easy adjustment and removal. Locate valves to ensure ease of access for maintenance such that no physical interference with other elements of the project exist.

G. Remote Control Valve Tags - One Remote Control Valve Tag shall be attached to stem of each electric remote control valve. Tags shall be numbered sequentially. Numbers shall correspond to station numbers in electric controller. Provide tags and corresponding numbers for wires pulled for future valves.

H. Valve Boxes - Install valve boxes to cover electric remote control valves. Install one valve per valve box. Top of valve box shall be flush with finished grade. Bury minimum 4 bricks under base of each box as support.

I. Control Wire Splice Boxes - Install control wire splice box to cover any splice in control wire. Top of valve box shall be flush with finished grade. Bury minimum 4 bricks under base of each box as support. Install control wire splice box to cover wires pulled for future valves.

J. Gravel Backfill - Backfill valve boxes and control wire splice boxes with gravel, minimum 6 inch depth.

K. Electric Controller

1. Reference plan notes and details regarding battery powered electic control module.

L. Irrigation Control Wires

1. Provide 24 volt system for control of automatic circuit-section valves of underground irrigation system. Provide unit capacity to suit number of circuits indicated.

2. Install control wires with irrigation mains and laterals in common trench where possible. Lay control wires neatly together to side of pipe. Provide looped slack at valves, corners, bores and snake wire in trench to allow for contraction. Tie wires in bundles at 10 foot intervals.
3. Common ground wire shall be white. No other wires shall be green.
4. Solder splices and protect with splicing material specified. Provide 12 inch long expansion loop within 3 feet of each wire connection and splice on runs of wire 100 feet or longer.

3.3 TESTING

A. General - Notify Landscape Architect 48 hours in advance when testing will be conducted. Conduct tests in presence of Landscape Architect.

B. Hydrostatic Test - Test irrigation main line, before backfilling trenches, to a hydrostatic pressure of not less than 100 psi for 1 hour. Piping may be tested in sections to expedite work. Remove and repair or replace piping and connections which do not pass hydrostatic testing. System shall not lose more than 1-1/2 gallons of water in 1 hour.

C. Shut off mainline at backflow preventer during non working hours until Contractor has demonstrated the mainline is stable.

D. Operational Testing - Perform operational testing after hydrostatic testing is completed, backfill is in place and irrigation heads are adjusted to final position.

1. Demonstrate to Landscape Architect that system meets coverage requirements, is a specified and indicated, and that automatic controls function properly.
2. Coverage requirements are based on operation of one circuit at a time.
3. After completion of grading, sodding and rolling of grass areas, carefully adjust lawn sprinkler heads so they will be flush with or not more than 1/2 inch above finished grade. Set shrub sprinkler heads not more than 1/2 inch above top of mulch.

3.4 MAINTENANCE

A. Contractor shall correctly maintain the irrigation system during the installation process and throughout the landscaping maintenance service period. Specified in Section 329400 - Exterior Landscape Maintenance.

B. Contractor shall provide "As Built" Drawings for new work, showing dimensioned location of valves, meters, backflow preventers, controllers, and mainline. Contractor shall request reproducible mylars from the Landscape Architect in preparation of "As Built" Drawings.

END OF SECTION 328400

SECTION 329300 - PLANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Plants.
2. Planting soils.
3. Plant drainage.

1.2 DEFINITIONS

A. Backfill: The earth used to replace or the act of replacing earth in an excavation.

B. Finish Grade: Elevation of finished surface adjacent to planting bed.

C. Prepared Backfill Mix: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

D. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

E. Pests: Living organisms that occur where they are not desired, or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

F. Topsoil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

G. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

H. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

I. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

1.3 SUBMITTALS

A. Work Schedule: Contractor shall submit a work schedule for all planting work prior to purchase and installation of plant material.

B. Product Data: For each type of product indicated, including soils.

C. Samples of backfill mix.

D. Samples of mulch.

E. Product certificates.

F. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of plants during a calendar year. Including manufacturer's recommendations and instructions recommending procedures to be established by Owner for maintenance of planting work. Submit instructions prior to expiration of Contractor's required maintenance period.

1.4 QUALITY ASSURANCE

A. Installer: Installation of planting work shall be performed by a single firm specializing in landscape and planting work. Contractor shall be licensed by the Texas Association of Nurserymen, shall possess an agricultural certificate, shall be a licensed pest applicator, and shall have not less than 5 years of experience in this type of work.

B. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

1. Pesticide Applicator: State licensed, commercial.

C. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1. Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions or disfigurement.

D. Delivery, Storage and Handling

1. Compliance: Ship planting materials with Certificates of Inspection as required by governing authorities. Comply with all applicable local, state, and federal requirements regarding materials, methods of work, and disposal of excess and waste materials.
2. Substitutions: Do not make substitutions unless approved in writing by Owner's Representative. If specified planting material is not obtainable, submit proof of non-availability to Owner's Representative together with proposal for use of equivalent material. Contractor shall submit proposal in a timely manner as to not impact project completion or installation of other work.
3. Analysis and Standards: All packaged products shall be delivered in original manufacturer's sealed containers. For unpackaged materials, submit analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.

4. Inspection: Notify Owner's Representative at least 2 weeks prior to installation, of location where materials that have been selected for planting may be inspected, either at place of growth or the site prior to planting. Plant material will be inspected for compliance with requirements for genus, species, variety, size and quality. Owner's Representative retains right to further inspect trees for size and conditions of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Contractor shall remove rejected trees immediately from site and replace with specified materials. Plant material not installed in accordance with Contract Documents will be rejected.

1.5 WARRANTY

A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.

1. Failures include, but are not limited to, the following:

   a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
   b. Structural failures including plantings falling or blowing over.

2. Warranty Periods from Date of Substantial Completion:

   a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
   b. Groundcovers, Biennials, Perennials, and Other Plants: 12 months.

3. Remove and replace trees, shrubs and groundcover found to be dead or in unhealthy condition during warranty period. Replace trees, shrubs and groundcover which are in doubtful condition at end of warranty period. However, if in the opinion of Owner, such doubtful material may survive, Contractor shall extend the warranty period for a full growing season. Owner will determine which items are in doubtful condition.

1.6 MAINTENANCE SERVICE

A. Initial Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Begin maintenance immediately after plants are installed throughout the maintenance period. See Section 329301 – Exterior Landscape Maintenance.

1. Maintenance Period for Trees and Shrubs: 12 months from date of Substantial Completion.
2. Maintenance Period for Groundcover and Other Plants: 12 months from date of Substantial Completion.
3. Maintenance Period for New Lawns: 12 months from date of Substantial Completion.

1.7 JOB CONDITIONS

A. Work Scheduling: Proceed with and complete planting work in a timely manner, working within seasonal limitations for each kind of planting work required.

B. Planting Time

1. Correlate planting with specified maintenance periods to provide maintenance from date of Substantial Completion.
2. Plant frost-tender trees only after danger of frost is past or sufficiently before frost season to allow for establishment before first frost. Do not plant in frozen ground.
3. Plant trees, shrubs and groundcover after final grades are established and prior to planting of lawns, unless otherwise directed by Owner's Representative in writing. If planting occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

C. Utilities: Refer to drawings and coordinate with Utility Contractor for location of utilities. Contractor shall be responsible for damage to existing utilities and structures.

D. Security: The Owner will not assume any responsibility for security of any materials, equipment, etc. during construction of the project until project acceptance.

E. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions beyond the scope of this contract, or obstructions, notify Owner's Representative of such conditions, immediately and before planting.

F. Pollution Control: Control dust caused by planting operations. Dampen surfaces as necessary. Comply with pollution control regulations of governing authorities.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

2.2 FERTILIZERS

A. Fertilizer for planting areas shall be granular fertilizer shall be a commercial fertilizer, uniform in composition, free flowing, and suitable for application with approved equipment. Fertilizer which has been exposed to high humidity and moisture, has become caked or otherwise damaged making it unsuitable for use, will not be acceptable. Application shall be Osmocote

13.13.13 + Iron by Sierra Chemical, 1-800-492-8255, 1001 Yosemite Dr., Milpitas, CA 95035, or approved equal. Broadcast and rototill fertilizer at the rate of 3 lbs. actual nitrogen per 1000 square feet into prepared planting soil.

B. Plant tablet shall be Agriform 20-10-5 Planting Tablets shall be evenly placed in planting pits at the following rate:

Material	No. of Tablets
1 gallon/4" pots	1/2 (or granular fertilizer)
5 gallon	1
15 gallon	2
30 gallon	3
Greater than 30 gallon	1 – for each ½ inch

2.3 PLANTING SOILS

A. Prepared Backfill Mix: Shall be 33% topsoil, 33% sharp sand, and 33% enriched bark mulch or approved commercially available soil mix. Add fertilizer as per specifications.

B. Topsoils
1. Provide topsoil which is fertile, friable, natural loam, surface soil, free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 2 inches in any dimension and other extraneous or toxic matter harmful to plant growth.
2. Obtain topsoil only from naturally, well-drained sites where topsoil occurs in a depth of not less than 4 inches. Topsoil shall not be collected from sites that are infected with growth of, or the reproductive parts of noxious weeds, especially nut grass. Topsoil shall not be stripped, collected or deposited while wet. Topsoil shall not be excessively acid or alkaline or contain toxic substances which may be harmful to plant growth. Topsoil shall be without admixture of subsoil.

C. Compost Mulch for bed preparation shall be Organic mulch free from deleterious materials and suitable for top dressing of trees, shrubs or plants. Mulch shall be composted, well-rotted, blended double-shredded hardwood mulch, black or dark brown in color. Mulch pieces shall be sized to pass through a 1” screen. Compost mulch: Enriched bark mulch for bed prep shall be With additional organic of peat and/or manure. No dyes, mushroom compost or other additives shall be used to artificially enhance the appearance of the level of composting.

D. Sharp Sand: Sand shall be thoroughly washed, coarse, graded sharp, construction or brick sand, free of clay balls, weeds, and grass. So-called cushion sand, blow sand, or creek silt is not acceptable for substitution where sharp sand is specified.

2.4 MULCHES

A. Mulch for Top Dressing: Shredded hardwood.

2.5 PLANTING DRAINAGE

A. Drainage Gravel: Drainage gravel shall be ¾” – 1” diameter clean washed gravel.]

B. Inspection tube – 3" diameter Polyvinyl Chloride (PVC) pipe shall be SDR 35 and conform to ASTM D 3034.

C. Sock Pipe: Sock pipe for drainage in planting areas shall be 4" diameter ADS perforated flex pipe with soil separator cloth.

D. Gravel for drain field around sock pipe shall be ¼"- ½" diameter smooth washed gravel.

E. Soil Separator or Filter Fabric shall be Polyspun XL Soil Separator; heavy duty, non-woven, with permeability minimum 200 gallons of water per min. per square foot.

2.6 PESTICIDES

A. General: Pesticide registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

2.7 HERBICIDE

A. Pre-emergent herbicide shall be Team Pro as manufactured by Bonus Corp Fertilizer, Houston, TX, or approved equal. Apply pre-emergent over all planting areas prior to spreading mulch at the rate of 7 lbs./1000 sq. feet.

B. If necessary, contact herbicide shall be Roundup by Monsanto, 800 N. Lindbergh, St. Louis, MO 63167, 314-694-1000, or approved equal. Apply Roundup only if necessary and if approved by owner or owner's representative. Do not exceed manufacturer's recommended rate of application.

2.8 STAKING AND GUYING

A. Reference drawings for staking and guying material.

PART 3 - EXECUTION

3.1 PLANTING

A. Excavation for Trees and Large Shrubs

1. Excavate pits with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Rough up sides of pit.
2. Make excavations at least half again as wide as the ball diameter and equal to the ball depth, plus 4" allowance for setting of ball on a layer of compacted backfill.
3. Dispose of subsoil removed from planting excavations. Do not mix with planting soil or use as backfill.

B. Planting Trees and Large Shrubs

1. Set stock on layer of compacted prepared planting soil backfill mix, plumb and in center of pit at same elevation as adjacent finished planting grades. Distribute additional fertilizer evenly throughout backfill mix in hole at specified rate. Place prepared planting soil backfill mix around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. For trees, apply Tree Inoculant at rate specified according to size of tree. Repeat watering until no more water is absorbed. Dish top of backfill to allow for mulching.
2. Prune, thin out, and shape shrubs in accordance with standard horticultural practice. Prune shrubs to retain natural character. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
3. Stake and guy trees as per the drawings.

C. Excavation and Soil Preparation for Shrubs/Groundcovers in Planting Beds

1. Excavate entire planting beds to a depth of 8 inches. Planting beds to have vertical sides.
2. Dispose of subsoil removed from planting beds excavations. Do not mix with planting soil or use as backfill.
3. Till bottom of planter 2”-4”, leave bottom of planter un-compacted. Backfill with 8” of prepared backfill mix.

D. Planting of Trees and Shrubs in Beds

1. Set stock on layer planting soil mixture, plumb and at the same elevation as adjacent finished planting grades. Place fertilizer tablets spaced in planting bed at specified rate. Place additional backfill mix around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. Water entire bed thoroughly, adjusts plant if settling occurs.

E. Planting of Shrubs in Beds

1. Set stock on layer of prepared planting soil backfill mix, plumb and slightly above adjacent finished planting grades. Place additional prepared planting soil backfill mix around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. Layer and distribute additional fertilizer in planting hole at specified rate. Water entire bed thoroughly, adjusting plant if settling occurs.

3.2 PLANT MAINTENANCE

A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.

B. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.

C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use practices to minimize the use of pesticides and reduce hazards.

D. Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

E. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

END OF SECTION 329300

SECTION 329301 - EXTERIOR LANDSCAPE MAINTENANCE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and all applicable specification sections, apply to this section.

1.2 WORK COVERED

A. Furnish all labor, materials and equipment as necessary to provide a landscape maintenance program in strict accordance with the Specifications and Drawings as prepared by Clark Condon Associates.

1.3 RELATED WORK IN OTHER SECTIONS

A. Examine all section for work related to this section.

1.4 REQUIREMENTS OF REGULATORY AGENCIES

A. Perform Work in accordance with all applicable laws, codes, and regulations required by authorities having jurisdiction over such work and provide for all permits required by local authorities.

1.5 CONTRACTOR RESPONSIBILITIES

A. The Contractor shall begin maintenance immediately upon starting any portion of the Work of this contract.

B. The Contractor's Maintenance Period shall continue 12 months beyond Substantial Completion of all Work in this contract.

C. Trees, Shrubs and Groundcovers: The Contractor's maintenance of new planting shall consist of watering, cultivating, weeding, mulching, re-staking, tightening and repairing of guys, resetting plants to proper grades or upright position, restoration of the planting saucer, and furnishing and applying such sprays and invigorants as are necessary to keep the plantings free of insects and disease and in thriving condition.

D. Irrigation System: Maintenance of irrigation system shall consist of monitoring and adjustment of the duration and frequency of the watering schedule, adjustment of heads for coverage and elevation, repair of leaks in both mains and lateral lines and all other work required to establish a complete working irrigation system.

E. Lawns: Maintenance of new lawns shall consist of mowing, watering, weeding, repair of all erosion and reseeding as necessary to establish a uniform stand of specified grasses.

F. Trash Pick-up: Pick up trash on site and empty trash receptacles at each site visit.

1.6 PROTECTION

A. Protect planting areas and lawns at all times against damage of all kinds for duration of maintenance period. Maintenance includes temporary protection fences, barriers and signs as required for protection. If any plants become damaged or injured, because sufficient protection was not provided, treat or replace as directed by Owner at no additional cost to Owner.

1.7 FINAL ACCEPTANCE

A. Work under this section will be accepted by Landscape Architect upon satisfactory completion of all work, including maintenance, replacement of plant materials and lawns under the Warranty Period. Upon final Acceptance, the Owner will assume responsibility for maintenance of the Work.

1.8 WARRANTIES AND REPLACEMENTS

A. Refer to other sections.

1.9 MAINTENANCE INSTRUCTIONS

A. At the completion of work, furnish two (2) copies of written maintenance instructions to Owner and one (1) copy to Landscape Architect for maintenance and care of all planting throughout the year.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Materials required for installed items shall match those already in use.

B. Samples of all materials not specified under other sections of these Specifications shall be submitted for review by Landscape Architect prior to use.

C. Topdress Fertilizer: Commercial fertilizer with guaranteed analysis of 16-6-8 or as required for application use. Fertilizer shall have a salt index per nuturient of less than 65.

2.2 REQUIRED EQUIPMENT

A. Contractor shall have available for their use the following maintenance equipment:

1. Lawn Mowers
2. Gasoline Powered Edgers
3. Trash Collection Equipment
4. Line Trimmers
5. Miscellaneous Hand Tools, Rakes, Brooms, Etc.
6. Blowers
7. Other as needed.

PART 3 - EXECUTION

3.1 WATERING

A. It shall be the responsibility of the Contractor to assure that the correct watering of plant materials is being accomplished through the following irrigation techniques:

B. Regular deep watering to all new trees until there are definite signs that the trees have established themselves, new growth is apparent, and no trees are experiencing stress conditions.

C. Frequent watering to the lawn areas to insure against drying. This may be accomplished as above, by the automatic sprinkler system, hand watering or portable sprinklers. Contractor shall monitor settings of automatic sprinkler controls and recommend necessary adjustments according to climatic changes.

D. Contractor shall be responsible for watering areas within the project limits that do not have irrigation systems.

E. Contractor shall be responsible for damages to irrigation system caused by maintenance operations.

3.2 MAINTENANCE OF TURF AREAS

A. Mowing lawn/grass areas shall be accomplished with sharp, properly adjusted mowers of the correct size for the various areas.

B. Mowing frequency shall be as per the Landscape Maintenance Program. Blade heights shall be set according to the following schedule.

1.	1 ½ inches	Initial Mowing
2.	1 ½ inches	April – November
3.	2 inches	December – March

C. In the event of a prolonged rainy period and a surge of leaf growth is anticipated, the mower height may be readjusted to prevent “scalping” or skinning of lawn on preceding cuts.

D. Lawn shall be edged evenly at all walks, headers and other structures as per the schedule. Use an egder, not a line trimmer.

E. Until the establishment of the turf, the Contractor will be responsible for replacing soils that have eroded onto the paved areas. Residual soils on paving will be removed and if not mingled with objectionable materials may be re-used in eroded areas.

F. Immediately upon observing any lawn grass spreading into shrub or groundcover areas, the Contractor shall initiate a program of removal and maintain this program throughout the maintenance period.

G. Any lawn grass appearing in paved areas shall receive an application of soil sterilant according to manufacturer’s direction. The sterilant shall be approved and will not be detrimental structurally to paved areas.

H. Special effort shall be given to the control to fire ants infesting the site. After control is accomplished, the ant mounds shall be lowered and tamped to the existing grade.

I. Apply top dress fertilizer after grassing, if needed.

3.3 MAINTENANCE OF TREES AND SHRUBS

A. Contractor shall adjust and tighten as required all tree staking and guying. Removal as directed by Owner's Representative.

B. All weeds within the mulched area around each tree and in each shrub bed shall be removed as often as required. Under no circumstances shall weeds and grass within planted areas be allowed to attain more than 4 inches growth.

C. Contractor shall be continuously alert for signs of insect presence or damage or the presence or damage from plant fungi. Upon locating such evidence, the Contractor shall report it to the Owner's Representative and take action as directed.

3.4 MAINTENANCE OF IRRIGATION SYSTEM

A. Irrigation System: Maintenance of irrigation system shall consist of monitoring and adjustment of the duration and frequency of the watering schedule, adjustment of heads for coverage and elevation, repair of leaks in both mains and lateral lines and all other work required to establish a complete working irrigation system.

3.5 TRASH COLLECTION

A. Removal of debris from the site unrelated to horticultural maintenance (paper, bottles, can, “Pirate” signs, etc.) shall be the responsibility of the Contractor. Contractor shall pick up trash and empty trash receptacles at each site visit. Frequency as per Landscape Maintenance Program.

3.6 DE-WATERING

A. Contractor shall de-water by pumping or siphoning as often as necessary to remove excess moisture from soil in planting areas and tree balls. De-watering to occur during scheduled visits as required.

PART 4 - SCHEDULES

4.1 THE EXECUTION ITEMS OF PART 3 IN THIS SPECIFICATION SHALL BE PERFORMED AS PER THE FOLLOWING SCHEDULE AS APPLICABLE FOR THE MAINTENANCE PERIOD:

MONTH	# OF VISITS PER MONTH
January	2
February	2
March	4
April	4
May	5
June	4
July	5
August	5

September	5
October	3
November	2
December	2

4.2 TOPDRESS FERTILIZER

A. Thirty (30) days after seeding.

4.3 MULCHING, WEEDING, WEED CONTROL, GUYING AND STAKING ADJUSTMENT

A. As required at each visit.

4.4 MEETING

A. Contractor shall meet once each month and at the end of the maintenance period with the Owner's on-site maintenance personnel. Contractor shall review irrigation system schedule and operation and other pertinent and helpful maintenance information at each meeting.

END OF SECTION 329301